

THE
CITY OF DIN



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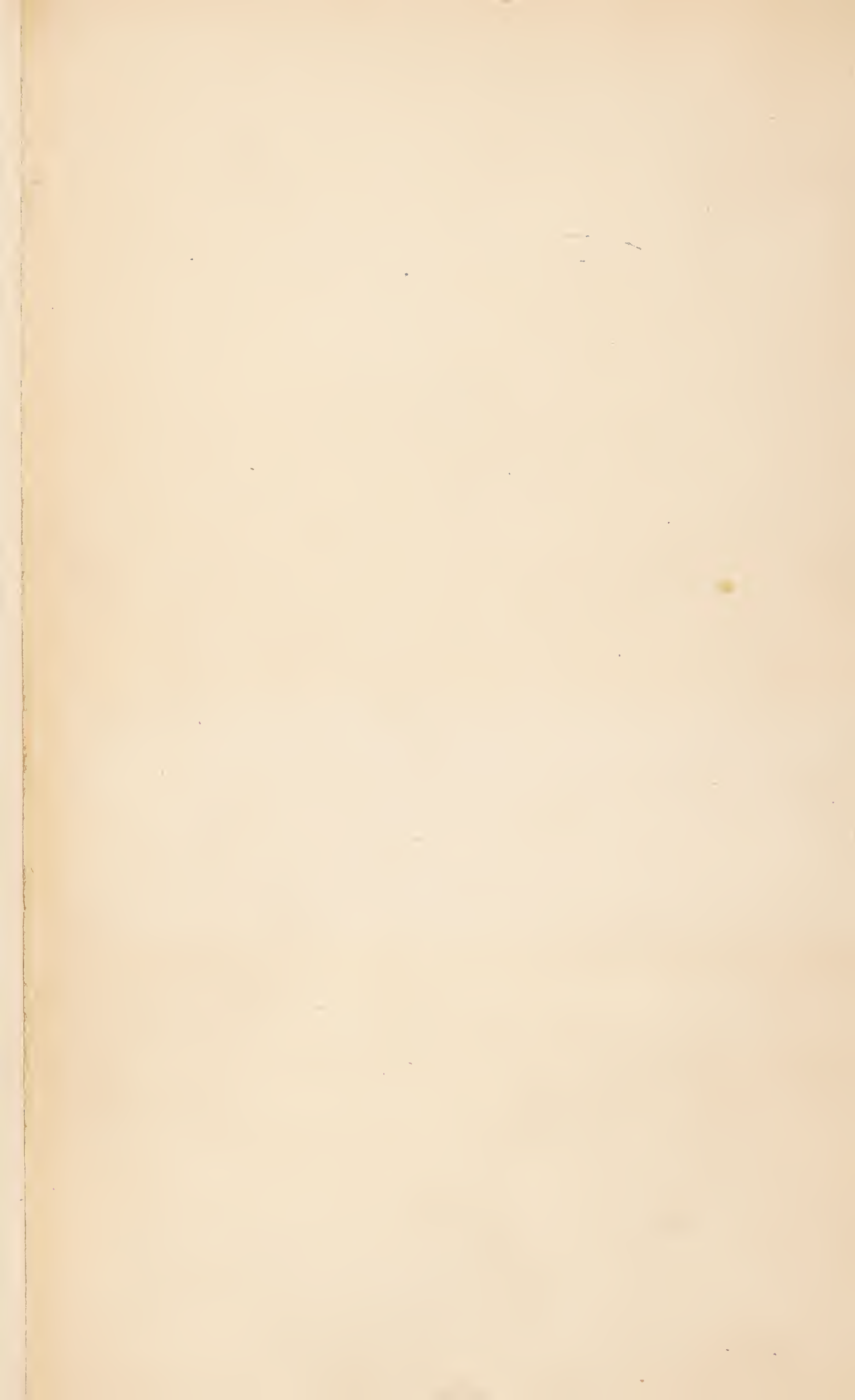
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THE CITY OF DIN

A TIRADE AGAINST
NOISE

BY

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PREFACE

THIS book has been written in the hope of rendering the world we live in quieter, and in that way more habitable, than which, surely, no better reason could be offered for any production. The only thing, indeed, that might be held to approach it in importance, as in value, is that of making two blades of corn grow where only one grew before. And, as far as that goes—but this may be merely the natural prejudice of the author—I can easily imagine the agricultural increase leading to nothing better than to wastefulness, whereas I can imagine nothing but good to result from the cessation of noise in the world.

So that—and every reformer of proper temper should esteem his own particular cause as of this magnitude—it is my belief that there is no reform in the world of to-day which is at once so necessary and so easy to accomplish as this one.

There are, alas ! and to be sure, many other evils in modern life which cry aloud for redress with greater urgency, but unfortunately the reformation of those would be less easily compassed than this of mine ; their uprooting would admittedly tear up and destroy the much that is useful as well as the more that is harmful, and so (it is agreed) their removal must be gone about in a tactful and gradual manner. In the face of such grand enterprises, then, with their call for secular patience, a man of moderate talent and opportunity may well blench. It is only given to a few to attempt the Matterhorn, but the Schwarzsee is well within the powers of the ordinary tourist.

As an ordinary tourist through life, then, I have undertaken this moderate task with a confident expectation of success, undeterred by the amazing fact that hitherto so few have led and fewer still have followed the assault against this particular outwork of evil, although its conquest must, one would think, provide us with a better stance for a movement against the grander fortifications that lie above and beyond it. For it will readily be admitted that the crusade is one

which, if haply successful, would increase life's amenities in more than one respect; among other consequences the raucous tones of the raucous-minded would give place to the gently-voiced opinions of the mild and tolerant. So that this particular crusade is only one small part of a grand effort at the refinement of the human spirit by a sort of fractional distillation; surely a most laudable and deserving cause.

The title I have hit upon is one which may legitimately suggest to the mind the propriety of treating the subject from the metaphorical as well as from the physical standpoint.

One can imagine how savagely Swift, how playfully Addison, how ponderously Carlyle might have employed this weapon in irony, and with what masterful power each in his own way could have disposed of it, to the eternal confusion of knaves and fools. Bunyan also, I daresay, would have been glad of it; and Nathaniel Hawthorne, whose airy fancy would have blown a pretty bubble of the idea, only to burst it straightaway by loading it with a moral.

The matter being so simple, then, and so

easy to develop, I am leaving the mystical or allegorical City of Din entirely to the reader's imagination, all the more gratefully as it would be difficult suddenly to switch the mind at the end of the book from three-dimensional fact to four-dimensional fancy where the simplest expressions loom large upon us through the heavy mists of allegory.

As the book stands, however, I may even now be accused of having had an occasional peep past the veil that separates the real from the ideal. If by doing so I have caused offence, then I am sorry for it, but in justice to myself I may point out that, like a cat on a rainy day, I got back to cover the instant I felt my feet wet.

Think, besides, of the temptation! Even now this metaphorical City fascinates me to such an extent that I can only with difficulty resist its attraction. And so it will anybody who thinks about it at all. The idea is so full of possibilities. The City is so full of din-mongers. . . . But there! A strong pull on the curb or Pegasus will bolt!

D. M.

TO
D. C. M.

“ Oh, mind ye, luve, how aft we left
The deavin, dinsome toun,
To wander by the green burnside
And hear its waters croon ?

The simmer leaves hung ower oor heads,
The flowers burst round oor feet,
And in the gloamin' o' the wood
The throstle whusslet sweet.

The throstle whusslet in the wood,
The burn sang to the trees,
And we, with Nature's heart in tune,
Concerted harmonies.”

—*Motherwell.*



THE CITY OF DIN

UNLIKE the world of men, the world of Nature is not noisy. It is, on the contrary, quiet. Quietness is, of course, a relative term. There is sound in the world of Nature. But the sounds we hear there are not noisy. Indeed, they are pleasant. Many of them are musical, and each one of them, yes! each one is pleasant.

Thus we already show that we have a clear notion of the meaning of the word "noise"! Ever since the days of Pilate, if not since before then, judges have demanded definitions.

"What is truth?" he asked.

There is no answer recorded.

But judges have not always been so lucky. Occasionally their posers are successfully countered.

Knowledge, according to some Spencerian extremists, is the definable, and only the definable. You do not know what you can-

not define. However, as this philosophy has already gone the way of all philosophies, after a shorter run than most, we need not bother our heads with refuting what is obviously an absurd statement. And yet it is not altogether absurd, perhaps. What is definable is often left undefined for lack of a definer, since the art of definition has this of the poetical about it, that your definer, being born and not made, is therefore rather rare. Once a definer has arisen, however, and the entity has been defined, we seem certainly to know it better, just as we get a deeper insight into our friends' natures after their handwriting has been submitted to the scrutiny of the expert character-reader. Richness and complexity, flaws and depths—flaws, by the way, like crevasses, very often open up depths—are then for the first time revealed to us, so that we are brought up short with surprise, not only at the labyrinthine revelations, but also at the preternatural cleverness of the mental detective who has, with deft and rapid touch, performed the task (or ceremony) of unravelment.

It is merely cynical to suggest that the

“characters” are stereotyped and handed out to each applicant anyhow (money down), instead of being the product of careful and painstaking diagnostic method. Cynicism is sentimentalism run to seed, or found out, or the cynic is the disillusioned sentimentalist, or something like that, says somebody. Whether or no, I cannot abide the cynic, and so I insist that the professional character-reader is a lightning diagnostician—a diviner as well as a definer of character (*sit venia verbo!*) and therefore worthy of all admiration whether he is correct or not. Lightning diagnosis is wonderful in itself. That it occasionally hits or occasionally misses the mark is not the point. It is the process we admire, not the result. In any case, as all must agree, we seem, as I have already said, to learn more about our friend from him than we could ever have found out from our own observations. And as positive information may always be accepted as correct so long as it fills a gap in knowledge—*teste* physiological theory—it is relatively true, as Pilate, doubtless, would have agreed.

For these very sound reasons we shall expect, when we proceed to define noise,

admiration at the process and agreement in the result.

In a word, noise is unpleasant sound. It is painful sound.

At one time in my gropings after a definition I said to myself, "Noise is anarchical sound," and in contrast with what the scientists term "music" this is correct. The difference between a noise and a musical tone is, they tell us, the difference between regular waves and irregular waves. One is disciplined, even, expected, and so harmonious. The other is out of step, unbalanced, unexpected, and so discordant. Wherefore we dislike it. (Modern musicians may, perhaps, have a different opinion.) But this definition did not satisfy my logical mind, seeing that there are anarchical sounds in nature which are not noise.

Thunder, for example, the loudest and grandest of all natural sounds, is certainly unmusical, anarchical, and surprising, and yet in spite of a recollection of old ladies cowering under the bedclothes, and of the Roman Emperor in his underground shelter, bomb-

proof to heaven's artillery, I will maintain against all comers that thunder is not unpleasant. Therefore it is not noise.

The crow of the cock, again, when he harbingeres the morn, is as little harmonious a sound as one could well imagine. And yet, St. Peter's experience to the contrary notwithstanding, it is not noise, for it is not, in itself, of a kind to make deafness welcome. And indeed, there is in it a defiant note that thrills the blood, sluggish though it be at the untimely hour of dawn.

Even the ass's bray! Even the bray of the ass has its points.

There was an ass in my native village, for instance, whose bray was welcome music to boys in the kirk, for punctually to the minute every Sunday the hour-long weariness of the minister's droning was for a moment shattered by the louder bray of the ass outside. Whereat nudges, grins, and visions of early release and Sunday dinner. You wouldn't call that noise, would you?

There are, to be sure, qualities other than that of music which will rescue a sound from

the category of noise. (This is really the heart of my argument.) The donkey's challenge, to continue our defence of braying as a public benefit, has something in it that sets folk a-laughing. Than the ass of Æsop in the lion's skin there is, to the genial man, no more lovable character in the whole range of fiction.

A modern philosopher, examining the foundations of laughter, holds that it is based upon a feeling of superiority to the laughed at. This, by the way, is an old doctrine. Hobbes, he of the 'Leviathan,' in his 'Discourse of Human Nature' thus determines :

"The passion of laughter is nothing else but a sudden glory arising from some sudden conception of some eminency in ourselves, by comparison with the infirmities of others, or with our own formerly ; for men laugh at the follies of themselves past, when they come suddenly to remembrance, except they bring with them any present dishonour."

With this teaching I do not agree. And to go no further afield than to the ass in the paddock, where does our superiority come in at hearing that beast bray ?

Without, however, turning aside any further from our set path, we may say that the ass's declamatory *recitativo*, as it maketh for laughter, is therein pleasant and therefore not a noise.

Were I preaching within the range of his song I might, to be sure, hold a different opinion. But I am not, gentle reader. At the same time being a reasonable as well as a reasoning person, I am willing to admit that there may be those who disagree with me and hear only noise when the donkey declaims. To reach agreement, then, let us say that whether the ass makes music or noise depends upon the disposition of his hearers.

The same conclusion is attainable, but less easily, with regard to dogs barking.

“ 'Tis sweet to hear the watch-dog's honest bark
Bay deep-mouthed welcome as we draw near home.”

“ And far, far off to the slumb'rous eve
Bayeth an old guard-hound.”

Here is no noise, but a very soul of music.

The opinion generally depends, I find, upon whether the dog belongs to me or to somebody else. My own dogs are lively,

cheerful, protective, when they bark. Other people's dogs, however, may be, and generally are, even to a lover of dogs, noisy, ill-tempered, badly-brought-up brutes.

But even your own dog is sometimes a nuisance to you. There is that unchancy habit of howling at the moon, for example, a habit which exercised the minds and fired the imaginations of our honest forefathers in medicine. Why does he do it? There having been no explanation forthcoming, the dog thereupon assumed a weird and mysterious character. Knit up thus in nature with the changing moon he sympathetically partook of her fateful qualities. In short, the dog became medicinal, and his reputed essence, *Album græcum*, was swallowed in table-spoonfuls three times a day for the healing of the nations.

Then there is his equally mysterious sympathy with music. It is just at those moments of deepest significance, had we the patience to fathom it, that our own dog becomes exasperating and the recipient of curses and kicks. That is to say, he is then noisy.

Who is there among us who has not been

kept awake at night by the recurrent needle-point of a dog barking? To reach its finest degree of torment the bark must be brief; staccato; and it is then to the sense of hearing what the Chinese punishment of water-dropping is to the sense of touch.

At first one slowly swims out of the ocean of sleep with the vague consciousness of some sound; some disturbing sound. A moment later the sound receives definite and groaning recognition, the stillness of the night being pierced at intervals by the short sharp bark of a dog—some restless impatient wanderer returning from a love orgie to a closed door.

“Wonder where he is—*Bark!* That sounds just across the street—*Bark!* No! On the other side of the common—*Bark!* Or at the farm behind—*Bark!* Dogs can be a weary nuisance, to be sure—*Bark!* Wonder how often it is coming. . . He has stopped!—*Bark!* Not a bit of it!—*Bark!* Would I were there with a gun! . . . Stopped again! Perhaps they’ve let him in!—*Bark!* Not yet!—*Bark!* That was before his time—*Bark!* Is there any sense in—*Bark!* Everybody around will hear him but his master—

Bark! Odd how you never hear your own dog. . . . Missed again. Wonder when the next will come. . . . Due now. How uneventful the silence is! . . . He *has* stopped! Now for sleep—*Bark!* Blast him!—*Bark!* It obsesses like pain—*Bark!* You comment and argue upon it—*Bark!*—but you cannot escape it. . . . Did he bark that time?—*Bark!* That is no mortal dog.—*Bark!* Some ghoul of the pit—*Bark!* What's that? A door! Opens and shuts. Thank God he is—*Bark!* . . . *Bark!* Like Kipling's tom-tom beating in the brain—*Bark!* Enough to drive one mad—*Bark!* Madness punctuated with—*Bark!* Crime might be traced to this—*Bark!* Murder—*Bark!* Murder of the dog if possible—*Bark!* If he is not accessible then . . .”

“*What* do you say? Will I get up and let the dog in? . . . Good Lord!”—*Bark!*

Or you can imagine Edgar Allan Poe working up this theme into one of his carved and polished impressionist stories. The Inquisition must certainly have been acquainted with this torture.

The dog, we must admit, requires the

services of some advocate—a veritable *advocatus diaboli*—if we are to include his barking among the pleasant sounds of Nature. But is not barking rather an artificial than a natural sound? I have heard it said that in a state of nature dogs do not bark. If so, then it is domestication, coupled perhaps with artificial selection, that has given us the barking dog. Why, then, cannot some merciful fancier produce a breed of silent dogs? A barkless dog should be no more difficult to evolve than a Manx cat, and with its advent our deepest reproach against the friend of man would also be silenced. In the meantime is it impossible to educate a dog into taciturnity? Some sanguine writer to the papers the other day expressed the opinion that since the famous muzzling order dogs had become less pugnacious. If that is so, perhaps a prolongation of the muzzling would have abolished the bark, as well as the growl; the snarl; the snap; and rabies.

I admit the weakness of that defence, but I cannot suggest any stronger line. The fact is that in wide and spacious country parts the dog, even when he barks, is not a source

of such serious or disturbing noise as he is in urban surroundings, where, indeed, he is out of place, and to more senses than one objectionable. He is insanitary, as our pavements show, and he is noisy. So that it would have been better, perhaps, if I had postponed my remarks upon the dog until I had reached the precincts of the City of Din itself.

Cats now ! The cat deserves a chapter to herself. For, although the place she occupies in the City of Din may be less prominent than that of the dog, her love serenades in the silence of the night are nevertheless disturbing, and expensive in slippers——.

Years ago, in my early days, when I was a struggling doctor, I purchased an ear-syringe of price. It was of brass, furnished with two hugeous rings, and brightly it shone in those days, being new, lacquered, and, I may confess it, for long unused. I see it now, that veteran—its lacquer long since rubbed off, one of its magnificent rings gone, and the other no longer circular. But albeit worn, dented, and tarnished, it remains one of my most hallowed treasures. I love

it as a painter might love his worn-out brushes, or a poet his fountain-pen—not because it won me patients and the penny-fee, but, far more wonderful, because it brought me sleep.

For years that syringe lay upon the dressing-table of my bedroom. For cats! There never was its equal. Many a secret assignation, many a nocturnal love-song, many an impassioned declaration, many a romantic elopement, has that syringe foiled and brought to nothing.

“Fssst! Yeowl!”

The window cautiously opened—the syringe filled with chastely cold water—a steady pour among the trees—it carried far—a scramble—a flight—and then peace; a peace that passeth understanding; and a grateful word breathed from the partner of my noises.

Cats, seriously speaking, are not tragical disturbers of the midnight, even at the worst. By a thrice-blest law of Nature violent emotions are brief, and even when syringes, slippers, and lumps of coal are not handy to come by, the storm soon passes and the loving voices are hushed.

So that the cat, in spite of her unsociable bearing towards the human male, stands less in need of apology than does the dog.

There is another of Nature's sounds that I have sometimes cursed—that of the corn-crake. But I am not at all sure that it is really and truly anathema. Walking home under the July moon through fields of ripening corn it may mingle in your memory with some impossible She who one far-off night leaned out of Heaven's bars to hold her arms open to you, of all the dwellers on earth. Thus the corn-crake, raucous and grating though it be, may be suffused with the atmosphere of youth, that far-gone irrevocable halation; and then, if not music in itself, it is at least the cause of music in others.

On the other hand, the July night is thund'rous, sultrily suspiring, with the air breathless, motionless, thick. The sheet of linen upon your bed is weighing you down as if it were a sheet of lead. Like the eel in the pond, you surge in a vain leap for coolness upon the iron rail of the bed. You have eaten too much, or drunk too much, or

smoked too much ; it is one of those nights when whatever you have done has been too much. Over-satiety broods upon you nightmarishly. Groaning and panting you struggle, while one after another there rise up in the darkness the stark figures of your sins ; and what is worse, of your weaknesses ; and what is worst of all, of your blunders ; whereat, even now, years after the crime, you blush again at your stupidity, and sticky sweats bedew your forehead. At that furious and stifled moment let the corn-crake rattle across the night ! You will register a climax—

“ Wer nie die kummervollen Nächte
Auf seinem Bette weinend sass,
Der kennt euch nicht, ihr himmlischen Mächte ”

—That grating voice is the comment of the ultimate judge upon your deeds done in the flesh.

No ! In spite of its harshness I dare not call the corn-crake noisy.

It is with no little trepidation that I begin my next section—What of the human child ?

On the threshold I am met by one of the chronic jokes of the alleged comic papers—the screaming midnight child and the tortured conscientious father.

In real life it is the mother who is conscientious and tortured. The father, ever mindful, as Stevenson said, of conserving the health of an invaluable parent, grunts, turns on his other side, and falls asleep.

As for mothers, the following newspaper-cutting speaks for them more eloquently than I can :

“A verdict of murder against the mother of a nine-months-old child was returned at a Westminster inquest to-day.

“The father said that his wife had been run down lately, and the constant crying of the child had upset her a great deal, and got on both his and her nerves.

“A housekeeper in the Temple said that she saw a woman carry a baby down the Temple steps on to the Embankment. Witness then saw her press the baby in her arms and jump into the river.

“It was stated that the body of the child was recovered off Charing Cross Pier some days later.

“The coroner said that the body of the mother was found in the river in another district, and the inquest on her would be held elsewhere.

“‘She seemed to have been driven off her head by the crying of the child,’ continued the coroner. ‘A constant crying child is a terrible affliction, and I can quite understand it.’”

Many years ago I was in general practice in a mining town. The work was never-

ending and lay chiefly among little children, unfortunates with whom illness, and painful illness, was all too common. One autumn I treated myself, for the first time in many years, to a holiday, which I spent among the hills of Perthshire. In addition to the usual sweets of holiday-time there was, withal, a strange peace deep-rooted in my heart, and soothing with wholesome air the entire atmosphere of life and thought. The peace I was sensible of. Its cause I never inquired after. But one day in my holiday tramps along the Highland roads I passed a cottage whence proceeded the familiar wailing of a child in some bodily or mental fret. Then, in a flash, I realised the reason for my peace of mind.

Experts, such as mothers, nurses, and medical practitioners, can generally tell you by the sound why a child is crying—whether hunger, pain, or temper. It is a curious fact that when the last-named complaint is chronic the vocal cords of the infant's larynx may develop the equivalent of corns upon the mis-shod feet of adults! "Screamer's nodes" they are called.

Our earliest sign of independent life is a

cry, and a good lusty cry it is. The first gasp of air is followed by a closure of the glottis through the narrow chink of which the air is forced out again, thus producing the cry. Meantime such of the air as remains in the windpipe and bronchial tubes is compressed, and, seeking an exit towards the spongy lung spaces, it aids in their inflation and expansion. Hence the satisfaction with which we hear this first assertion of a new individuality, and the pains we take (and give) to evoke it when it is absent or feeble.

After this initial demonstration the baby settles down to enjoy life quietly. The common belief among childless people that a baby often cries is pure ignorance. For although there are a few infantile pessimists who fill their world with lamentations, the vast majority of infants are "good" and only cry when they are hungry, angry, or pained, just as their elders do.

For the rest, listen to the chuckling and gurgling of contented infants! The baby laughter! The first attempt at baby speech! Who is there who does not smile in sympathy at hearing those beautiful sounds? And

what misanthrope dare call this heavenly music by any other name?

Out of fairness to possible cavillers, I have given the first place to what they might term Nature's noises. I can remember no more of them, in England at all events. And even where they fall short of true music they possess, as I have already hinted, other delightful qualities conferred upon them by association.

“Sounds do not always give us pleasure according to their sweetness and melody, nor do harsh sounds always displease. We are more apt to be captivated or disgusted with the associations which they promote than with the notes themselves. Thus the shrilling of a field cricket, though sharp and stridulous, yet marvelously delights some hearers, filling their minds with a train of summer ideas of everything that is rural, verdurous, and joyous.”

Come down a step into my little shop. Here is a goodly show of delights.

What of the trees, when the wind, that grand old harper, smites his thunder-harp of pines? You cannot express that sound in

words. But it has been expressed in music, in German music. Buchanan, speaking of the pines as a harp—an Æolian harp he means, not the twanging harp of Tara's halls—would doubtless have agreed that the bowed strings in orchestra can render the wind among the trees as nothing else can—that rushing eerie sound with its sense of restrained power. But you ought to hear the sound itself! For that, go into the woods at night, as it is in the darkness that the mystery of the wind comes nearest to you, whether it is whispering the secrets of fairy-land or hallooing the chase of the clouds. The inner meaning of that music poets have been seeking to tell since language first began, but they never can and they never will, for it is ineffable.

Then there is the thundering roll and crash of billows on the beach. The sounds of the sea!

We are children of the sea-foam, we English, though we cannot, alas! lay claim to the beauty of Aphrodite, for, to be frank, we are a stockish and an ugly race. But the sea is in our blood, and the salt winds are

the breath of our nostrils. So when the Bullers of Buchan are thundering among our north sea cliffs, our souls expand to join the white riders, and to plant, with the Almighty Himself, their footsteps in the deep.

Something like this is what the waves in tempest send us with their spray.

As to the gentle splash of those watery terraces in calm, what sweetness in repose can equal it? Smoothed are the furrows, suave and glassy the ripples, while the spacious polished levels reflect the calm of Heaven itself, and give a foretaste of rest after struggle, of peace after strife.

Leaving now those deeper and grander tones of the voice of Nature, we turn to its gentler beauties. And first and foremost come the songs of our birds :

“ Was it true the Grecian sings,
Birds were born the first of things,
Before the sun, before the wind,
Before the gods, before mankind,
Airy ante-mundane throng—
Witness their unworldly song ! ”

The late Harold Frederic, a too-soon forgotten writer, decrying the singing tribe in

man, compares them bitterly with the birds, whose brains, he more than hints, are atrophied to provide them with voices. This slander needs no refutation, although, to be sure, the most intelligent of the birds, the crow tribe, are not distinguished by the sweetness of their voices any more than parrots are. Nay! what the flower is to the plant so is the song to the bird, a redundant and gratuitous gift.—Only apparently so, say the biologists. In the case of flowers the utilitarian end of attracting insects is plain enough. And so, in like manner, the song of the bird is merely a means to the end of attracting and fascinating its mate. The bird makes love by his song.

We may grant all this, to be sure, and still remain unconvinced that the teleological is a full and satisfying explanation. Logicians might ask—they would ask in vain—why only some birds fascinate by song, why only some plants blow flowers. Ostrich eggs are duly fertilised, although so far that creature has shown no inclination to attract its lover by concord of sweet sounds. And I have no doubt that the nightingale hen would have admired her lord and master just as much,

had his love-song taken the form of the corn-crake's. The mystery is here, that the birds' songs fascinate not only their mates but also our poets.

And so in spite of the strait Darwinian, we fall back upon a fancy. The fancy that Nature sometimes plays and frolics; that living cytoplasm loves to be alive; that it has a joy in sheer living which it loves to shout abroad for no ulterior reason, for no reason at all; that this redundant, exuberant activity it is that produces Art in all its protean manifestations; and that the fine, careless rapture of the blackbird, no less than the Athena of Pheidias, is art, play, frolic, the joy of living. Both alike are created by life's surplusage of energy, life's overflowing stream. In all vital processes, when you come to think of it, our needs are not only met, they are exceeded. The gods are lavish.

That is why the Cosmos must seem such a puzzle to the utilitarian. He moves about in worlds unrealised.

Then there is the odd fact to which I have just alluded, that the song of birds and the beauty of flowers harmonise with our own sense of fitness and of joy. This, indeed,

touches the depth of existence. For it is the equivalent in the emotional life of that enigma of the brain, that the human intellect is capable of bringing into harmony with its own modulation so much of the mystery of the universe.

Here, to be sure, is a strange chord of thought to be set vibrating by a lark carolling unseen in the sky. And I can only, as apology for the digression, if digression it be, plead that no words of mine on the beauty of bird-songs dare venture on utterance beside the gorgeous praise of Keats, of Shelley, of Tennyson.

Are there any other natural sounds you would like me to consider? The cry of the plover, lonely and clear; the whirring whistle of the snipe; the cawing of rooks at nightfall; the lowing of cows; the rippling of a brook; the swishing fall of rain on the sea; the rush and roar of an Alpine avalanche; the thundering downpour of a waterfall.

The world outside the walls of the City is full of pleasant sounds, bringing joy, health, and quiet breathing. And were these all

the sounds that this world contained, how placid would our natures be !

From this picture I now bid you turn to that I am now about to paint.

Civilisation is noise. At least modern civilisation is. And the more it progresses the noisier it becomes.

Could we be transported back in time to the days of our forefathers, the first impression we should get would be one of surprise at the exceeding quietness of the world.

Picture Thebes at the height of its splendour. Temples and deep shadows fill the foreground, and from the distance one can hear the musical cry of the water-seller, and the creak of the shadoof, as the peasant draws up water from the river to irrigate his patch. Wayfarers shuffle along like sheeted ghosts in the sun-lit streets and alleys, their bare or sandalled feet making scarce a sound, while the occasional rattle of a passing chariot only serves to accentuate the general stillness.

Even in the quarries whence the great blocks are hewn to build the temples and the

tombs there is but little noise. Hammers and crowbars are in use, no doubt, but their strokes ring clear and musical amid the chip and scrape of the chisels, and the work done by the moistened wooden wedges is silent until the rock splits asunder with a sudden crack and crash—very different this from the din of the modern workshop and factory.

Man's noisiest occupation is battle, and we must admit that wherever men fight there will be turmoil and uproar. But compared with modern warfare an ancient battle is an affair of twittering sparrows.

Come now to Athens. Here also is stillness; stillness broken only by the hum of the peripatetics haranguing their students and disciples in the groves around the Akademe. Even the Panathenaic procession itself would strike us as quiet, for the loudest sounds are the mingled songs and laughter of the worshippers and holiday makers, the clatter of the prancing horses, and the troubled lowing of the sacrificial cattle.

The tragedies of Æschylus, the plays of Sophocles and Euripides, the farces of Aristophanes, are played in spacious theatres

open to the sky and to the city, and yet the actors are audible throughout the whole circle of the auditorium.

Take Rome next. Rome, the centre of the world, the cerebrum of the most efficient social organisation ever constructed, is nevertheless, compared with London and New York, a city as silent as a dream. The streets are paved with solid blocks of travertine, and the wheeled vehicles make some stir, but street-traffic as we know it is unknown. Most people get about on foot, or horseback, or in litters borne on by slaves, while merchandise is transported in mule packs, or in vehicles drawn by staid, slow oxen.

The quietness of the ancient cities may be imagined when we remember that both the Athenians and the Romans practised the art of public speaking in the open air, all their political gatherings being held in the streets and open places. Now tell me, what Stentor in modern times could, like Demosthenes or Cicero in the Forum, or like Paul on the Areopagus, address a meeting from the steps of the Royal Exchange and hope to hold his own amid the uproar?

The same must be true of the mediæval city. For one thing, the narrow winding streets prevented anything like an accumulated stream of traffic with its unending clatter.

Florence, for example, must have been quiet, even in times of political upheaval. Otherwise, Dante, adding a City of Din to the City of Dis, would have appalled us with a circle of the Inferno given over to the devils of racket. It is true that the "demon Cerberus" (a barking dog, by the way), "who thundering stuns the spirits, that they for deafness wish in vain," and the mingled cries and wails of the damned, struck terror to his soul, but Dante's imagination never conceived the possibility of noise as torture in itself. What noise he did hear in Hell was incidental, so to speak. Obviously he had never experienced din as we moderns know it, and when he seeks to convey to his readers the idea of some overpowering crash, all he can liken it to is the sound of a tempestuous wind in a forest.

No! It has been left to scientific civilisation to fill the world with stridency. We have to pay for our comforts in racket.

And it has been left to Sime, a modern artist of incisive wit, to depict among the punishments for sin the eternal grinding of a street-organ, and to the feeble pen of the present writer to attempt a description of the noises that assail the ear in the modern city. To that City of Din we now pass.

“ All hope abandon, ye who enter here ! ”

Writers of the antiquarian reminiscent school, of whom England is so prolific as almost to suggest that she is in her dotage, often lament the loss of our old English street-cries. Let them take courage, remembering that lavender is still vocally hawked about in its season and that the milkman's yodel is still audible from our area steps with the clink of his cans as an *obbligato*. Neither of these, to be sure, is a noise according to our definition, seeing that they are both fresh, pleasant, and even musical. The muffin-man also with his bell and his board still perambulates our quiet Sunday streets during certain months of the year. But I am afraid that the auditory disturbance he creates does approach in quality to noise.

It is an interesting and, as far as I am aware, a hitherto unremarked fact that the tones of the voice can be modified in such a way as to carry not only over long distances in space, but also through an atmosphere burdened with excessive sound. Of the former Sir Walter Scott in 'The Maid of Geierstein' gives a description. Presumably it is the Swiss yödel he has in mind when he speaks of the "singular shrill modulation" that astonishes his hero on the mountains—that yödel which has now degenerated into one of the side-shows of Switzerland, like the cow-bells.

"Why," I asked my Führer one day, "do they hang bells round the cow's necks?"

"*Um den Herren zu gefallen!*" was his reply.

The "Coo-ee" of Australia is another of those far cries. It was bequeathed to the early settlers by the Australian natives, and similar modes of projecting the voice to great distances are practised by many other uncivilised races.

Workmen in our own country who labour amidst noisy surroundings, of which more anon, instinctively adopt a peculiar tone

when conversing at their work. Beetlers, for example, throw into their voice a special quality which enables it to traverse the bone-shaking thunder of their machinery. And in our noisy city streets, also, the draymen, taxi-drivers, and bus-drivers, contrive to exchange badinage at considerable distances in spite of the jarring rattle and rumble of the traffic. Of recent years, however, I notice that they are beginning to rely chiefly upon the language of signs.

A charming suffragette of my acquaintance once informed me that she was attending a class where women were being taught how to address a meeting amid the noise of the London streets.

“How are you taught?” was my natural question.

“Oh!” she replied, “One of us speaks while the rest of the class imitates the noise of the traffic.”

It is to the penetrative quality of its notes that the popularity of the street-piano is due, the music of which seems to travel along a plane of comparative stillness to reach our ears, and sometimes also our hearts, through, amidst, and yet in defiance of the massive

clatter of street din. There is a peculiar sweetness in unexpected music, and especially in music with a background of jangle. Witness mill-girls singing amid the metallic whir of spindles, and children warbling in a waggonette or landau, like canaries in a noise.

We must not omit to mention also the common and pathetic London spectacle of a guitar-player strumming his strings just outside the door of a public-house. Looking to heaven and longing to enter in, he directs his notes by some dexterous sleight of hand so that they shall be heard only by the elect and not by the passer-by in the street.

(For the benefit of foreigners who may read this book I hasten to explain that the cruel exclusion of the musician from the tavern is due to our peculiar liquor laws.)

In London of recent years, since the motor vehicle with rubber tyres has to such a great extent replaced the horse-drawn vehicle with its iron-girt wheels, the noise of the traffic has altered very considerably in quality. It is less clattering, less jarring, less varied, and to this grateful change the provision of

smoothly-surfaced roads has contributed not a little. But while it has altered in quality we must also regretfully note that it has not lessened in quantity. The roar of the traffic of motor-buses, taxi-cabs, and motor-cars is of a deeper, more thunderous, and more overpowering nature than in former days, principally because the vehicles are heavier and are driven at a much greater speed. In addition to that fact there are also two new sources of unpleasant and disturbing noise, part and parcel of the motor vehicle. One is the jarring and grating of the change-speed lever, particularly in the motor-buses, and the other is the motor-horn.

The motor-horn ! The motor-horn ! I often wonder why in all the world such an instrument of torture has ever been permitted to exist even for a single day ! But there it is ; an institution, fixed ; established ; to be conserved ; and of a variety . . . !

When the motor-car took its first experimental run the noise of the explosions in the cylinder was all undamped.

“Never do !” said the wiseacres, shaking their heads. “Far too noisy !”

“Too noisy?” echoed the engineers,—
“soon settle that little trouble.” And they
proceeded to invent and to perfect the
silencer and the multiple cylinder, with the
happy result that nowadays the engine pro-
duces a mere gentle purring, not unmusical.
This little example shows what can be done
when quietness is insisted upon.

But the engine and gear-box having been
quietened, needs must that the horn develop
or the King’s lieges suffer scathe, all unused
as they were in those early days to swift
movement. So ingenuity again set to work,
producing noise this time to take the place
of the noise they had just abolished. Hence
the horn.

Horns! Surely never before in the whole
raucous history of din have such fiendish
contraptions split the air.

First and foremost there comes the hoarse
reedy *squawk* that betokens the cheaper
car, the taxi, and the like, croaking like
some gigantic raven from a Dinosaurian age
as the driver dashes round a corner or
threatens a slow-going horse-vehicle in front
of him.

Then follow horns of a more ambitious and

even more assertive quality ; some of them passing for “musical”—music being the least disagreeable of noises in this connection—like the “Gabriel” horn, whose sounding diapason is startling enough, in all conscience, to awaken the dead ; the bugle horn that tootles mechanically the dominant notes of a chord ; the horn that sounds all the notes of the chord simultaneously. And at the end of the list come unearthly screeches, squeaks, and groans, from the various noise-producers “on the exhaust” ; a rattling whistle that vainly aims at continuity ; and finally that ear-rending hollow cough, likened by a tortured surgeon in the middle of his sleepless night to the bark of a sea-lion at the Zoo.

The modern chemist has been able to concoct compounds which are, to all intents and purposes, genuinely novel creations, every whit as deserving of that proud title as the products of M. Worth. So with motor-horn noises. For the first time in the history of the universe we are condemned to endure the infliction of genuinely novel noises. Man, in a word, has created, all by himself, unprecedented varieties of din. No

wonder the nervous jump! Really, man's possibilities are so appalling!

Vaguely hovering about in the shady background of my memory there is a hazy recollection (or have I dreamt it?) that Parliament had been gestating, and that after much groaning labour it had given birth to an Act forbidding the use of horns and such-like noises "on the exhaust." Whether or no, these exhaust and exhausting noises still bellow on, deafening, startling, and harassing the noise-worn nerves of the dwellers in Din, until Death, as the eternal *Silence*, allures us now as never before he hath allured the people of this earth in all the long history of time!

Drivers vary in their reliance upon this warning trump. A few will glide from one end of London to the other without once compressing the rubber-bag, or diverting the exhaust pipe from its normal functions. But the vast majority of them pin their faith to a constant exercise of the malign reeds of their brazen trumpets, in consequence of which there is no escape from the noises they produce. Bad enough during the day, their effect is ten times worse at night, when every-

thing else is silent, and the squawks, coughs, and screeches echo and re-echo along the deserted streets, waking the weary from their hard-won slumbers, and denying their so badly-needed rest to the sick and suffering.

Exasperated beyond endurance by his callous trumpetings, I have frequently thrust my head out of a taxi window and have bidden the surly devil: "Don't drive so much on the horn!" And as a set-off to his muttered but perfectly audible blessing, have soothed my ruffled feelings with the reflection that were all fares equally sensitive, or considerate, or courageous, London streets would be much more pleasant and not any less safe. Not any less safe because, naturally, when he dispenses with his raucous herald the chauffeur drives with greater care and with more consideration for pedestrians. Nor is the loss of time in any degree serious.

In my opinion the motor-horn is quite unnecessary, and were the motor-horn abolished and the change-speed lever of the buses silenced, the noise in our streets would be rendered much less wearing.

The trams, to be sure, would still remain ;

those gawky, perambulating crystal palaces, whose hollow rumble sounds so dirge-like, just as if they were mourning for the money their upkeep costs the ratepayer! This sorrowful din adds greatly to the traffic noises in many of our streets, and I cannot suggest any method of reducing it. For once the old advice to resist the devil must be reversed.

The sensibility to noise varies very much in different individuals. There is no doubt that in time we learn to ignore it, a happy acquisition which is rapidly secured when the noise is continuous or expected. Everybody, for example, has heard of the miller who could not sleep out of the sound of his mill-wheels, and everybody, I suppose, has had the curious experience of waking up when the bedroom clock stops ticking.

In some of the hotels in Paris they have a clock in every bedroom, each clock being electrically actuated from a central power-station, and the minion of the devil who invented the process has so arranged the mechanism that the clocks are silent, save and except at the minute intervals, which

are announced by a loud, single, solitary tick. Clocks that tick only once a minute ! And, moreover, you cannot stop one without deranging the whole circuit and bringing every clock in the building to a standstill. If you are slightly deaf, if you are a sound sleeper, if your sensibilities are obtuse, well and good. But if you are endowed with delicate perceptions, if your sense of hearing is acute, if your brain sleeps on a hair-trigger, then I warn you to avoid those hospices of torment as you would the devil himself.

Now it is the irregularity and unexpectedness of the motor-horn that makes a London house so unrestful. Wherefore I inveigh against it.

I once knew a man who kept a small drapery shop in one of London's great thoroughfares, where the thunder of the traffic goes on unceasingly day and night save during the "wee sma' hours ayont the twal'." Here above his shop he lived, and in course of time he saved enough money to enable him to retire. On giving up business he bought a small villa in which to spend his remaining years, not, as you might expect, in

some peaceful suburban nook, but in another equally noisy high road.

“Because,” he explained, when I appeared surprised, “it is so much more cheerful where there is some stir.”

Acclimatised as he was to racket, this perverted man would have been bored to death by quietude and an absence of auditory incident.

All the same, there is something to be said for his point of view.

I remember once experiencing the absence of auditory incident myself with a curious mental effect. During a holiday on the Lago Maggiore one autumn a few years ago, it was my custom to leave the margin of the lake and to plunge into the labyrinth of chestnuts and vineyards that clothe the mountain-sides above Baveno. Here, especially in the twilight, I became aware of a sense of mystery and eeriness among those sombre and lonely glades. With Nature holding her breath, a vague expectancy stole into the mind, so that if Pan and his rout of Nymphs and Satyrs had started out of the shadows the apparition would scarce have surprised me. Even a little sound like the

thud of a chestnut-burr falling upon the ground was almost sufficient to explode the train of suggestion that the antecedent mental processes had laid.

It is, I imagine, this expectancy that gives birth and being to ghosts and apparitions. And the expectancy itself is, without doubt, dependent in its turn upon the withdrawal of the wonted flow of gross sense-impressions from a brain accustomed to their continual influx. The mind is tense and vacant, the tension being due to the vacancy.

In similar surroundings at home in England the sensation, or rather the absence of sensation, is less noticed, possibly because the feeling of cold on the skin which was absent in the warmer south, the occasional hail of a man, the bark of a dog, or the distant murmur of a village, supply enough of nerve incident and movement to prevent this curious and not altogether pleasant abstraction of the outer world.

The abstraction is not altogether pleasant, for as the classic Calisthenes of advertisement fame says :

“The ear is particularly sensitive to the effects upon it of solitude and the reverse.

“In a large building the sound of one’s own footsteps, where there is no other sound within hearing, is disturbing, eerie—almost terrible. Who can walk the silent corridors of a great museum, the deserted aisles of a cathedral, or the empty floor of a department store without experiencing a certain vague uneasiness? But where the sound of many footsteps is blurred into one continuous undercurrent of sound, this feeling changes into one of subconscious safety.”

The experience is, of course, universal. All of us have at times been startled by the sudden and mysterious sounds that break the silence in a house after everybody else has gone to bed and the place is shut up for the night. A resounding crack from the dark corner cupboard; a rustling movement in the empty hall; a mutter or a whisper as if the family ghosts were holding a midnight colloquy under their breath on the landing—all very natural, no doubt, but . . .

There is, indeed, a strange significance even in certain every-day sounds that almost amounts to mystery. The crunching of the gravel by carriage-wheels, for example, always seems to convey some deep portentous meaning, as if, like the knocking at the gate in ‘Macbeth,’ it marked the arrival of change, the advent of the future. Obvious

enough at a wedding, it strikes to the heart at a funeral, but even in every-day life it brings eager, expectant faces to the windows.

One of the Belgians who had fled from his country on the invasion of the Germans told me a story that illustrates this point. After having left Malines on the first threat of attack upon that city by the enemy, he and his wife, hearing that the Germans had not yet entered the town, returned secretly to their home to get some clothing for their provision in exile. When they had left a few days before nothing had been damaged, but in the interval the Germans had been shelling the city, and on their return the fugitives found that all the windows of the houses had been smashed, the streets being littered with splinters of broken glass. Having reached their home in safety they bundled together the few odds and ends they required, piling them upon a wheelbarrow for transport. They then set off again, trundling their barrow through the empty streets in the dead of night, and, the narrator said, the skittering noise made by the wheel as it passed over the broken glass left such an impression upon his mind that

never again in all his life would he be able to forget that sound.

My friend, Dr. James Donelan, told me another apt and interesting story. His maternal grandfather, who died in 1871, aged 104 years, happened to be in Paris during the great Revolution, and was in the crowd in front of the Tuileries when the King and Queen were brought back from Varennes after their vain attempt to escape. He used to say that though the Place de la Révolution was packed with people, and though he was some distance from the *berline* containing the royal family, the stillness of the crowd, broken only by the tramp of the horses, the grating of the wheels and the jingling of the harness, made the deepest impression on him.

In this connection also the following extract from a letter describing the experiences of one of my friends may be cited :

“ There is a strange emotion,” he writes, “ to which I am at times subject. It always comes when I am listening to a play in the theatre. As I sit rapt in the story unfolding itself before me, a door opens on to the street and the roar of the traffic becomes audible for a moment. In contrast with the mimic life in which I have been immersed I feel then as if the outer world were asserting itself with emphasis and dignity ; the

emphasis and dignity of reality. And at that moment the deep significance of life impresses itself upon my attention, engendering a peculiar emotion of almost tear-compelling intensity, and yet impossible of any other expression."

In times of tense public interest or excitement also one may now and again experience a somewhat similar tingle of expectation while awaiting news of the impending event. This is especially noticeable at night, when in the dark and silence of the streets a window is rattled up, or a door banged, and we hear strange voices with a tremor of excitement in their tones; or when from away across the darkened skies a confusion of shouts and cries falls upon the ear. We then experience the strain and quiver of feeling, shot with a thread of fear, through which the mind passes as we stand in the antechamber of time awaiting the birth of great events.

An analytical examination of any of those and similar incidents and experiences will show that while the impressiveness of the sound is due partly, no doubt, to its character and associations, it owes the greater part of its value to the fact that it is a silence-

breaking sound. The silence it is that constitutes the background against which the sound stands out so strangely vivid. Emphasis, that is to say, is imparted to it by the contrast.

Walking along a country road on a dark night, we always keep our eyes fixed upon any light that may show itself. In other words, like darkness, silence is unwelcome to the mind, even to a mind jaded and worn by the auditory jangle of our City of Din. For, although it is true that after a busy day in the roaring streets, one may at first greet with pleasure the restfulness of dead silence, nevertheless it is a fact that the pleasure of the relief is soon followed by a sense of uneasiness and strangeness from which one is glad to escape. The mind abhors a vacuum.

The matter has been examined more or less scientifically. Dr. Victor Delsaux relates that he was once inside a chamber of silence designed by Prof. Zwaardemaker, of Utrecht, and the absolute stillness of it he found intolerable.

“I had a similar sensation,” he goes on to say, “while travelling in Norway within the Polar Circle. There,

sounds disappear more and more as we ascend towards the north. There are no singing birds, and, the population being scanty, one remains for hours and sometimes for whole days without hearing a sound. And that is very disagreeable."

The same effect is obtained in the depth of a large pine forest, and it is this silence coupled with the dark foliage that gives to those woods their sombre and funereal aspect.

So that although this book is written in the hope of reducing noise, I do not in its place offer silence as a desideratum. Silence means solitude.

There is a common notion generally prevalent (save among those who are afflicted with it) that deafness brings silence. Would that it did! Sometimes, of course, the deaf do live in a soundless world, or at all events in a world of reduced sound. But in most cases of acquired deafness the patient lives amidst noise, for along with the inability to hear external sounds clearly there is combined an abnormal amount of subjective sound, that is to say, of noises generated in the ears by the disease which is causing the

deafness. This we call *tinnitus aurium*, or briefly *tinnitus*. This subjective noise is, as a rule, continuous and incessant, pealing on through the night as well as through the day. Its intensity as well as its character varies in different people. In some patients it is merely a faint and distant blowing sound, so slight as to be audible only in silence and when the attention is specially directed to it. In others, again, it is hard and ringing—a glittering ribbon of metallic sound. In a third variety the noise is composite in character, whistling, throbbing, and at times rising to a roar or a crash, loud enough to be heard even above the noise of the street traffic. It is often one of the sorest burdens of deafness, this everlasting tinnitus, and as might be expected it is the irregular, variable, composite variety which gives rise to most distress. Indeed, in irritable or neurasthenic people it may induce an amount of strain sufficient to threaten the reason, a threat which unfortunately is sometimes realised. Tinnitus has been known to lead to suicide.

To show the extremities to which severe tinnitus occasionally drives a patient the

following case, which came under my own observation, may be cited.

A lady of unusual culture and intelligence had suffered from noises in the ears for many years. It was a composite tinnitus; that is to say, it was made up not of one sound only, but a mixture of several different noises—blowing, pulsating, and singing—an unearthly concatenation of row which was so disturbing as to render sleep impossible save when the noises of the outer world were loud enough to drown the internal din. Within hearing of street traffic the patient could sleep; in the stillness the noises in her own head kept her awake. So, being an ingenious person, she had an artificial noise-machine constructed consisting of an electrically-driven paddle-wheel, the floats of which, churning and splashing in water by her bedside, made enough noise to enable her to sleep!

Unfortunately, tinnitus of this very severe character is very seldom remediable. Occasionally it may be cured by an operation which destroys the sense of hearing altogether. Occasionally the operation fails.

We hasten to add, however, that tinnitus of this devastating character is one of the rarities of medicine. The vast majority of patients soon learn to endure it with resignation and even to treat it with humour, like the polite old gentleman who once astonished

a fellow-traveller in a railway-train with the strange remark :

“ I hope, Sir, that the noise in my ears is not disturbing to you ! ”

People get used to tinnitus as the miller gets used to the clatter of his machinery, as we ourselves get used to street rumbles of the ordinary kind, and as suffering women get used to pain and sorrow. It is well that the brain has the power of thus closing the door upon unpleasant sensations, otherwise life would soon become intolerable. In point of fact, it is upon the integrity of this door that the tone and colour of the mind depend. Conceit, wine, and general paralysis of the insane bang, bar, and bolt it. We are then optimists. But let the pressure on the outside become strong enough to burst it open ; we then become pessimistic. In the healthy mind the door stands ajar, ready to be closed tight or opened wide according to our desires and necessities, and it is only when the mental resistance is low, as when the sufferer is tired out, or when he is of the nervous build and constitution to begin with, that troubles such as tinnitus, bodily pain, an uneasy conscience, and so forth, thrust their

way into the mind and insist upon a permanent residence. Then we suffer from the *idée fixe*, the obsession, the worry.

The question now arises whether the continual battering of the nerve-centres by noise, whether subjective or objective, is or is not always harmful. According to some authorities, when once a painful stimulus has been received, it is passed on into the nervous system, and although its entrance to consciousness may be denied, it cannot be altogether annihilated. All that the nerve-centres can do is to side-track the impression. The stream of painful sensations cannot be entirely blocked, it can only be diverted into other subsidiary channels where its effects will be found if they are sought for.

I am bound to say, however, that, in my humble opinion, this view is not altogether borne out by fact. There is evidence, I believe, to show that the nervous system can actually so dampen and stifle an afferent impulse, probably by scattering its effects broadcast, as to destroy it utterly for all practical purposes, thus rendering it harmless. But that this may occur the impulse must not be too intense or too prolonged,

and the brain must not be enfeebled by tiredness or disease, or hypersensitive by birth or training. Unfortunately, however, as we are about to see, those adverse conditions are rather common nowadays, particularly among city-dwellers.

Now, what tinnitus is to a deaf patient, the noises of civilisation are to the city-dweller. The modern city is suffering from tinnitus, as incessant, as persistent, as distracting as that symptom can be at its worst. And this in an age when comfort and refinement in other directions have so sensitised the nervous system that it reacts to stimuli in a manner unknown in bygone days. The modern mind is a delicate instrument, the needle-indicator of which trembles and oscillates to the finest currents of thought and feeling. By culture and education we have acquired the sensibility of the artist or poet. And yet we continue to expose this poised and fragile instrument to the buffetting of a steam-hammer, to the shriek of a locomotive!

That I may not seem to exaggerate with regard to the sensitiveness of the town-bred Englishman, let me remind the reader of the stolid bumpkin. What is that stolidity but a

heaviness of mind, a tardiness of response to stimuli, a prolongation of the reaction period, to use the physiological expression? Such stolidity, although frequently food for easy jesting and light laughter, is not without many advantages, particularly in a City of Din. It supplies to the mind armour of proof from which all but the shrewdest of Fate's arrows fall blunted, and within which its workings go on, unimpeded by the clamour without. No ordinary distraction avails to divert such a man from his set course, and although he necessarily must remain shut in from much of the fascination of the outer world, he is also barricaded against the many minor pricks that pain and annoy the irritable.

Indeed, just as the city-dweller in England thus at once admires and despises his country-cousin, so, curiously enough, do the Germans, the French, and the Americans regard the English as a nation. Among our many puzzling characteristics one is to them clear and comprehensible, and that is the quality of the countryman, of the heavy, stolid, slow-footed, sluggish-minded clodhopper. And it is just this blind and deaf

stolidity or stupidity in the Englishman of passing days and generations which has earned him—the “God-dam rosbif” Englishman—the shafts of ridicule of the clever of all nations, from Voltaire to Bernard Shaw.

Why, then, trouble about the effects of din upon this tortoise of the mind; this numbskull bait of the wits, too stupid even for ridicule to arouse? Surely he must be callous to the noises he himself has filled the world with! Then why not let him be and turn our energies towards some more necessary crusade?

Simply because the clodhopper, the numbskull, the pachyderm, the tortoise, is becoming sensitive, maybe under the very stress of the conditions he himself has created. His monster has turned upon him and, laying sundry sledge-hammer whacks upon his carapace, is breaking through upon the delicate animal ensconced within it.

Wherefore I wield my pen in praise of quiet, and demand that the unnecessary noises of the world shall cease. So that all of us, stolid and sensitive alike, may feel, and see, and hear, and live within the bounds of moderation. Moderation, in sooth, is my

theme. If excess in well-doing is but a short-cut to Hell, as the Nicomachean Ethics suggest, if it is wrong to be drunken, shameful to be a glutton, dangerous to throw the reins loose upon the neck of the fiery steed Passion, surely it is equally a sin, from the point of view of scientific morality, to expose hearing to an excess of sound.

I cannot find a good word to say about noise, and that is a fact.

As I sit here writing there falls upon my ears the sound of church bells, calling the faithful to worship, the faithless to thought.

Now there are bells and bells. There are the singing bells of Chiswick, for example, so rich in overtones and harmonics that when they are rung down there by the river an angelic choir seems to be blending its voices with the peal and to be filling the air with music celestial; so soft, so sweet, so mellow is the sound. In the olden days when the bell-metal was fused before being poured into the mould, the people were advised that the more gold and silver they cast into the mixture the more mellow would the bell sound. *Si non è vero, è ben trovato.*

If it is true, however, the bells of Chiswick bear noble testimony to their patrons of long ago, whose piety we hereby gratefully acknowledge.

Many of us, I daresay, can remember how Irving was wont to make Mephistopheles writhe and twist with anguish when he heard the church bells chiming. Alas! some of the bells that break the Sabbath nowadays must be sources rather of pleasure than of pain to the devil by reason of the sulphurous language they evoke among the parishioners.

“How beautifully those bells sound!” said one old gentleman to another.

“Eh? What?”

“I said, How beautifully those bells sound.”

“Eh? What? I can’t hear——”

“I said, How beautifully those bells sound.”

“Oh! Damn! Those infernal bells are making such a devil of a row I cannot hear a word you say!”

In England the Established Church alone seems to ring bells, save here and there when a solitary knell comes surreptitiously from the Roman Catholics, as if they were apologising for intruding. But in Scotland, the home of warring sects, each kirk exercises

its right to hang and to ring as many bells as it likes. Fortunately there is a prejudice, probably economical, in favour of one kirk one bell, and thus the evil is not unlimited. But all the same a Sunday in Scotland in a town well-belled is an experience in jar and jangle which is apt to cast doubts upon the "principle of sectarianism." First the Auld Kirk starts off with a sound as if the "clapper" were shaking lumps of rust out of the bell; then the United Free—two kirks two bells—chip in with a rich, not to say moneyed tone, followed by Episcopalian tinkles, E. U. jangles, the Auld Lights, the Catholics, and so forth. For all the world as if they were clerical hounds giving tongue in a heresy-hunt, and as each seems to be chasing the others, you have the argument in a circle, sounding and resounding as if it would continue to all eternity. But fortunately, however willing may be the spirit, the flesh in the beadles is weak, and one by one they leave off, so that you can hear once more the ripple of the burn and the hum of the bees in the peaceful sunshine.

In the future world—I do not mean the heavenly world—in this world in the future,

I am sure that the inspector of nuisances will have among his duties the inspection or rather the audition of noises, including bells. Why “nuisances” should be legally restricted to noisome smells and should exclude noisome sounds, I do not know. At any rate, in those coming days there will be an end of the wild chaotic bob-majors and clashes that shatter the peace of our star-lit skies, and serve no purpose but to elevate the conceit of the Ancient Dis-order of Bell Ringers. Would they were bodily hung as high and their feelings wrung as often as their bells are !

There is, of course, in the sound of bells, especially when softened by distance, something that touches the depths of the heart. And we have all, I suppose, tried to copy Schiller in fitting words to chimes—merry words, gloomy words, and even big fateful words, as when the Westminster bells toll out the hour :

“ Rise they or fall,
Evil and just ;
One, but, and all
Shall end in dust.

Doom ! ”

I remember years ago being first thrilled by this indescribable music. The steamer was leaving Fort Augustus after having threaded the locks on the Caledonian Canal. As it moved away across the loch the wind carried its dirty smudge of smoke in a trail across the face of the Benedictine monastery, and at that moment the chapel bell rang vespers. It just seemed as if the flaunting spirit of modernity had smitten the ages across the mouth, and in return for the insult had received the calm rebuke :

“I am the voice of unnumbered years. Thou shalt pass as thy smoke. But I, I shall endure to the end !”

There is a fine peal of bells in the handsome tower of the University of Glasgow, a peal that rings the quarters. That dead and gone benefactors of their race have given to the University students in that city of mist a group of beautiful buildings is common knowledge, and the ineffaceable memory of the cloisters, turrets, and quadrangles, is a life-long pleasure to those fortunate enough to have been educated there. Comes as a climax to the beauty of hall, staircase, and

archway, the mellow music and deep boom of the bells. One pauses :

“ In such access of mind, in such high hour
Of visitation from the living God,
Thought is not, in enjoyment it expires ”——

When—can you believe it?—Anti-climax of the nethermost! What is that little hurrying tinkle? Is it some extra-mural school jealous of its mighty neighbour, and impudently determined in this land of free din to assert its right to make a noise? Not a bit of it! The twopenny tinkle is also a University bell. A University bell? *The* University bell! “It came from the old College in the High Street,” and so (a delightful *non sequitur*, Mr. Professor of Logic) despite the painful incongruity, it is still rung to hurry the student to the classroom ere the door close.

But oh! for a Petition to the High Authorities who dispose of events upon those classic slopes! Your petitioner humbly sheweth, and so forth, that the old bell is ridiculous, and he prayeth that you now grant it an eternal rest. Let it hang by all means! But let it hang silent.

There are in Europe three cities of bells : Rome, Oxford, Edinburgh. Worlds apart in theological atmosphere though they be, in all three the bells seem to ring out very much the same sort of message. In all the thoughts of even the careless and vagrant outsider are led to ponder for a moment over the deep mystery that underlies the rippling surface of events. Emphasising the distinction between what appears and what actually is, their voice insinuates into the mind of the most worldly some hint of the great Perhaps that has attracted and evaded curiosity since ever men began to think.

“There is a castle built over an abyss, through the gratings of whose dungeons come and go strange whisperings of wild hopes ; unfathomable fears. . . .”

The next of our sections is that which deals with music. It is necessary first of all for me to premise my remarks upon the subject with the declaration that I yield to no one in my love for music, which is only another way of saying that I am as susceptible as most of the influence of music upon the mind. Consequently whatever strictures I

may venture upon must not be scorned as the mere growling of a tone-deaf curmudgeon.

In point of fact, however, a disclaimer of any kind is unnecessary since I find myself supported and many of my views trenchantly expressed by no less an authority than Mr. Thomas Beecham, who, in a lecture reported in 'The Times' on June 3rd, 1915, handles the subject of music as a public nuisance with some degree of vigour.

"Music," he says, "forces itself into every entertainment from the drama to the cinema show. People cannot be allowed to meet for conversation or a meal without having their ears assaulted with music, generally of the worst type, and all because those trained to practise music as a fine art cannot earn a living without becoming a public nuisance. Its perpetual din makes the mass of people insensitive to the finer aspects of music, and a public revolt from its tyranny is to be expected. . . . Unfortunately, the insensitiveness which such music breeds raises an effective barrier against it; when one lives constantly in a noise one ceases to long for silence."

The reader may in this connection recall sympathetically the frequent complaint in von Hohenlohe's 'Memoirs,' thus :

"Sat at dinner beside the *Freifrau von Süssenlippen*, a most charming lady, but unfortunately the band made such a noise that it was impossible for us to converse."

Mr. Beecham's remarks imply that so accustomed have the people of the present day become to din that even in their moments of idleness and retirement they cannot bear to be deprived of their normal environment of uproar.

Although this is probably true of a large section of the community, there are yet in Israel seven thousand which have not bowed the knee unto Baal, and it is as their prophet that I speak.

To us that only is music which, gentle and appealing, touches the finer emotions exclusively. Roughness and violence, though not strength and vigour, are foreign to it. In truth, it is only in Darkest Germany, that roughness and violence are mistaken for strength and vigour. In civilised countries they are recognised to be merely weakness in masquerade. Blaring music is, in a word, noise, and the vilest of all noise, for lilies that fester stink far worse than weeds.

This kind of bastard music has found its most perfect exponent and most accurate interpreter in de Sousa, typical product of the loudest and noisiest of all civilisations, the American.

Every nation has the music it deserves!

Some might be inclined to couple Wagner with de Sousa. But Wagner only reaches at rare intervals and in odd moments the plateau of screams whereon the more modern genius revels. Wagner is incapable of anything like sustained flight amid the thunderclouds where de Sousa rides the whirlwind and directs the storm. At those sublime heights his feebler pinions fail him and he is fain to sink to lower and gentler levels where he is more at ease. "The Ride of the Valkyries," for example, is all too brief, and its rushing violence is, quite patently, mere forcible feebleness. De Sousa, on the other hand, could blare forth a similar theme with such sustained and effective power, such almighty and devastating force, that nothing less than an artificial *membrana tympani* could suffer intact the crash of the elements upon his mountain-top.

Hail! de Sousa! Triumphant Expositioner of Transatlantic Din! Conquering and to conquer!

In vocal music—I dare not call it singing—in vocal music, on the other hand, Wagner has certainly achieved this much of success,

that only vocal cords of a leathery texture are capable of enduring the force he demands of them.

One result of this is, as every teacher of singing knows only too well, that so great is the strain thrown upon the voices of modern operatic singers that only a few of them, and those not the finest, can retain their quality unimpaired for more than a few years. Basses and contraltos must always be deep and impressive; tenors and sopranos high and thrilling.

The other result is an addition to the Din of the City——

Some years ago I used to reside in the neighbourhood of the Paddington railway terminus and a lady vocalist. When at frequent intervals the air was rent by a shriek, one was really never quite sure whether it was proceeding from the railway station or from the lady's larynx. (Operatic managers who desire that vocalist's address can have it on application.)

Previous to the Teutonic era in music we had the Italian, the vogue of which extends back as far as the time of Addison and Steele,

for in the 'Spectator' you will find several essays upon that craze which, *mutato nomine*, might have been written yesterday. Now, while German music is forceful and violent, the music of the theatrically strong man, Italian music with its scales and runs, its grace notes and trills, is the music of the contortionist. Both alike are radically base and false, and both alike are the products of thoroughly bad art. Virtuoso music, whether vocal or instrumental, as compared with true music, is like false compared with true eloquence. The one, like moonlight, draws attention to the producer. The other, like sunlight, directs attention to the subject.

At the present moment there is needed in music, and especially in vocal music, a movement back to Nature. Music awaits its Millet.

Indeed, in all music of the "would-it-were-impossible" type, the world awaits its reformer: someone stern and uncompromising, not to say fanatical—an iconoclast—a musical John Calvin. And the first idol he will hale forth and smash will be the domestic piano.

While all this is true, however, I do not

for a moment intend my strictures to apply to anything but certain varieties of modern music. On the other hand, much of the orchestral music of our day is certainly admirable in its grace, refinement, and power. With all its irregularities and extravagances, and in spite of many will o' the wisp adventures, never before in the history of the world has music reached such heights of splendour and such depths of meaning as it does at the present day. Its very errors are only the errors of youth and high spirits.

Indeed, the modern development of fine music might almost be regarded by the philosopher of Quiet as the provision of a sanctuary of refuge in the heart of our City of Din; where not only the bruised spirit but also the aching ear may find rest and healing. The modern man's music is his reaction to the crashing noise about him. Who has not observed how the *Pathétique* is heightened in effect when through the music you can hear the street traffic? The storm-cloud sets off the rainbow; the garish daylight enhances the rosy hue of Sainte Chapelle. It is the contrast, you say! My very point. It is the contrast that has made this music. Seek a

remedy for noise and you will find it in music. In music, not in silence. Music it is that relaxes and relieves the fret and strain of noise. True music, mind you! Not the bastard music of our denouncing, which is merely a mode of noise.

We proceed now to another section of our subject, that of the noise of railway trains.

Ruskin's was a powerful, if somewhat too eloquent pen, and Ruskin, who had a rich vein of hatred, heartily detested railway trains. But even Ruskin fell short of the possibilities of his theme in this matter of trains.

To the onlooker the shriek and roar of a train is bad enough, but it is transient. A shrill whistle, a roll of thunder, and it is all over till the next time. But to the traveller within the train the noise it makes brings continued and unmitigated discomfort. Everybody who has ears to hear has heard it, and everybody, I suppose, has analysed it during the weary blankness of a long railway journey. * Children, following the rhythmic clank of the wheels as they bump over the rail-joinings, make a kind of song of the sound, transmuting the recurrent din in their

tuneful natures into some nursery rhyme or folk tune. But in adult life this kind of involuntary reaction to rhythmic sound is an indication of nerve-exhaustion. When, for example, we find ourselves keeping time with hand or foot to the tick of a clock, it is always associated with that curious empty depression that follows a day of worry and harassment. The cause of the rhythmic muscular movement is to be found, probably, in the side-tracking of a recurrent sound to which I alluded in a former section. When we are vigorous the nerve-impulses are obliterated, when we are tired they are side-tracked.

In addition to the clank of the wheel at the end of each length of rail, there is generated by a train in motion a continuous complex noise of a roaring, thundering character, which is the sound produced between the wheels and the rails deepened and amplified by the hollow wooden carriages, and reverberated and re-echoed, also, from cuttings, bridges, and tunnels.

The sounds, as a whole, are relatively inoffensive when the train is moving slowly, but when the pace begins to gather the noise begins to grow until at the highest speeds it

reaches to a pitch of harsh and clattering uproar that would be alarming were we less accustomed to it.

As an occasional addition to this inferno of din there comes the shriek of the railway whistle. With this ear-splitting, nerve-racking noise, I have a serious quarrel.

The first objection I take to it is that, as a signal, save in thick weather, it is quite unnecessary. In these days of electric signalling the locomotive whistle is nothing short of an anachronism. This is a bold statement to make, but I believe it can be substantiated.

In the second place, granting the necessity of a sound-signal, why must it be a whistle of all sounds in the world? In Switzerland, in America, and in other advanced countries, the locomotive advertises its approach by means of a bell. It may not, perhaps, be quite so rich in tone as the bells of Chiswick. It may possibly provoke profane prose rather than sacred song. But, after all, a bell is less damaging both to ear and temper than the steam-shriek of our English locomotives.

As a matter of fact, there is one British railway, the Caledonian, which, instead of the

piercing, high-pitched whistle, employs one of a low tone like the horn of a steamship before the days of the syren (name of evil omen). And I can testify to the fact that, from our point of view, the Caledonian railway whistle is quite innocuous, and at the same time it is undoubtedly as efficient a signal as the shrill whistle.

That being so, why do not the other railway companies adopt it? Not because it has never occurred to them, for in point of fact their attention was directed to the advisability of making a change as long ago as 1896. In that year, Dr. Thomas Barr, of Glasgow, to whom we owe much of our knowledge concerning the baneful effect of loud noises upon the hearing, read a paper before the Otological Section of the British Medical Association, upon the deleterious action of the ordinary locomotive whistle, with the result that a resolution was adopted by the Section calling the attention of the railway companies to the matter, which resolution was sent to them in due course. But with characteristic British stolidity and contempt for science, the railway companies ignored the suggestion.

Everyone, I suppose, has observed (and

suffered from) the curious phenomenon of the rapid rise in pitch of an approaching engine-whistle. Beginning at its usual level it rapidly rises with the swift approach of the engine to a shrill and deafening shriek, and then, as the engine rushes past us, it declines in pitch even more rapidly to its former level again. The same whistle heard at a distance would have sounded as an even and uniform note. Why this difference? The cause is physical. As the engine races towards us with whistle blowing the sound-waves emanating from the latter are progressively increased in number in each second of time because the rate of speed of the engine itself adds to the rate at which the sound is produced, thus piling up the waves of sound, a physical process which our brain interprets as a rise in pitch. Then, the climax having been reached, the withdrawal of the engine progressively diminishes the number of sound-waves per second and the pitch falls until it reaches the point at which the waves become uniform again. Naturally, this variation will always occur when a whistle is coming towards us or going from us, but when the engine is far

distant the change will be so slight relative to the distance as to be imperceptible.

In addition to the whistle the locomotive engine is responsible for another ear-shattering noise, that pernicious hissing of steam escaping from the safety-valve, to wit. Usually, for obvious reasons, produced at a railway station, it fills the space around it with a monstrous dissonance from which there is no escape. You must grin and bear it. Perhaps, of all the deafening sounds of ordinary civilised life, this is the most irritating, the most harmful.

That the complex din of engine and train actually damages hearing is shown by the fact, as we shall see by-and-by, that engine-driving is one of the occupations that produce deafness.

Those of us, however, who only occasionally or for very brief periods travel by train, are not permanently deafened by the row, unless our ears are unduly sensitive to sound.

What we suffer from is train-tiredness, a form of nerve-exhaustion.

Train-tiredness is quite a common and

familiar experience, and yet, at first sight, it seems rather difficult to account for.

We set out on a long railway journey fresh and bright. We take our seats and settle down comfortably with books and magazines by our side to while away the time. The train starts and the day wears on, its monotony being pleasantly broken by meals in the restaurant-car—unless, by the way, we happen to be dining in the Rhone Valley express, which supplies a combination of clang, clatter, and smash, unequalled anywhere in my experience. Evening comes, and with it our destination, and then on alighting from the train we find that, in spite of a day spent in doing nothing, we are tired out.

There are many different varieties of tiredness, each with its own characteristic group of symptoms.

First of all, we have muscular tiredness, not by any means an unpleasant sensation to a healthy man, so long as the muscular exertion has not been excessive. But if the day's work has been so hard that exhaustion results, the feeling is not only unpleasant,

it is actually painful. The muscular weariness of a hard-worked ploughman or labourer is certainly very painful. In any case, however, it gives rise to characteristic bodily sensations easily recognisable as the consequences of muscular exertion.

Now the difference between muscular weariness and mental weariness, everybody who has experienced both can determine. What, however, is less generally appreciated, although to be sure we are all aware of them, is that there are different kinds of mental weariness, kinds clear and distinct from one another—as long, at all events, as they stop short of exhaustion. Into the state known as exhaustion all tend to pass, and in that state the symptoms are pretty much the same, no matter what the cause of the exhaustion may have been. These symptoms surgeons are well acquainted with, under the name of “shock.” Short of exhaustion, however, as we have already said, the sensations and symptoms vary with the cause.

The weariness, for example, that follows a long day of book-study, when the mind has been concentrated upon the uphill work of

absorbing and memorising a series of dry and uninteresting minutiae, is quite unmistakable. Its most prominent symptoms are an aching restlessness and craving for movement with an inability to learn any more.

The tiredness, again, sequent upon a day spent in the examination hall as a candidate is also something peculiar and characteristic. Here we have muscular languor, with a vacancy of thought like absent-mindedness, which is followed by deep, dreamless slumber.

The tiredness of a witness in a law-court after the excitement and strain of a long examination and cross-examination partakes of characters similar to the last, and is worlds different from the tiredness of the barristers who have conducted, and of the judge who has had to listen to the case.

The tiredness of a ship's officer who has been robbed of his sleep by duty in the night-watches is quite different from the weariness that ensues upon a night of spontaneous insomnia. And so on.

Some forms of tiredness make us hungry ; some make us bad-tempered ; some make us warm-hearted and generous, sympathetic and sentimental. But all, like old age, have a

tendency to simplify and to expose the emotional side of our nature, for better, for worse.

Now in all those varieties of tiredness the cause is plain and obvious. They are the result of exertion. Energy has been spent and virtue has gone out of us in a specific direction and for a specific purpose.

But when we turn to train-tiredness the explanation does not lie so near to the hand. Here we have been doing nothing and yet we are tired.

In some people, no doubt, the prospect of a railway journey and the fussy excitement entailed thereupon may lead to a prodigal waste of energy, like that of an old lady I once knew who always washed her feet before setting out on a railway journey—

“There may be an accident,” she explained, “and my legs may have to be bandaged.”

But even without any of the excitement attendant upon the unusual, a long day spent in the train proves to be very tiring. What is the reason for it?

My own opinion is that the cause is to be

found in the long bombardment by noise of the auditory nerve-centres in the brain. And the reasons for this opinion I shall now set forth.

It is a well-known fact that any excessive stimulation of nerve-centres is tiring. A few hours of severe pain, like neuralgia or toothache, may reduce even a strong man to a state of weakness. "Pain," of course, is the name we give to the sensation evoked by an excessive excitation of sensory nerves. And, indeed, the "shock" that follows an accident such as a broken leg, for example, is, according to Crile, a well-known American surgeon, due to this very sensory excess that we are talking about. (Shock, by the way, may come on apart from pain, but to discuss that fact would lead us too far aside from our subject.) Joy, moreover, can kill, and sorrow is often fatal.

Now in railway travelling a rolling stream of loud noise is incessantly battering naked unprotected nerve-endings, a hyper-excitation that, like pain or anxiety, keeps the nerve-centres in the brain on the stretch for hours together. Surely this, of itself, is sufficient to induce tiredness.

It is an interesting and perhaps convincing fact that if the ears are stopped with some material, more or less impenetrable by the louder sounds, then train-tiredness is surprisingly reduced.

The experiment is worth trying if only for the evidence it affords of the dependence of cerebral activity upon external stimuli. The outside world it is that keeps us alive.

Plugging the ears against sound, especially on a train journey, induces first of all a surprising feeling of restfulness which we presently recognise to be due to a withdrawal of a strain of the presence of which we had nevertheless been unaware previous to its disappearance. The restfulness after a time passes into a pleasant drowsiness, a sort of half-dream state in which we lose count of time, and wander aimlessly along by-paths of thought, a species of reverie—due obviously to the transformation of the violent noise into a low droning sound—which may deepen into real slumber if the eyes are closed. It is easily broken by mental effort, but the *dolce far niente* is much too pleasant to be thus needlessly disturbed. As time passes, however, it fades away spontaneously and it

seldom returns upon subsequent journeys when plugs are used, although, of course, the noise is always excluded. On night journeys, however, the diminution of the disturbing noises always conduces to sleep more refreshing than the usual rackety slumber of the night-mail.

With the subjective symptoms of train-tiredness everyone is familiar; everyone, that is to say, who is not deaf, the deaf, as we might expect, being less liable to it. The mentality is heavy and sluggish; the appetite is depressed; and some people suffer from headache and general muscular aching. This last feeling may be due to the prolonged constraint of the body, a constraint with which is coupled an incessant muscular activity necessitated by the constant changing of bodily balance as the carriage swings to and fro in its progress. That the constraint and muscular activity are not in themselves the main cause of train-tiredness, however, is evident from the fact that there is, as a rule, much less weariness after a long motor ride than after a train journey.

Objectively, the train-tired traveller manifests signs of what is known as vasomotor

exhaustion, the cutaneous capillaries being empty, the face pale, the extremities chilly, and the pulse at the wrist slow and hard.* In spite of the aching there is little muscular asthenia unless the tiredness is extreme, for it is relieved by a walk in the open air. Otherwise there is no cure like a hot bath and a good dinner.

While it is probable that the semi-voluntary muscular movement called forth by changes in bodily position has little or nothing to do with the production of train-tiredness, at the same time I am inclined to think that in other respects the muscular system does play an important part in its causation.

In describing the effect of plugging the ears I referred to the feeling of relieved strain which follows that act, and in order to complete our explanation of train-tiredness it will be necessary for us to inquire into the nature of this strain.

There is an intimate association between the sense of hearing and the muscular organisation. We have already mentioned the

* Train-sickness, like the commoner sea-sickness, is probably due to hyperstimulation of the vestibular centres in the brain. It has nothing to do with auditory hyperstimulation as far as we know.

side-tracking of unpleasant or persistent sounds. Now the side-track followed is always one that leads to the muscles. Further, rhythmic sounds lead naturally to rhythmic movement, as in dancing and marching to music. The ease with which rhythmic sound bears us on its pinions is due to the fact that it to some extent relieves volition of the necessity of repeated effort, by substituting for it a regular recurrent auditory stimulus, to the rhythm of which the physiological timing of nerve and muscle movement seems naturally to adapt itself.

Now, besides the obvious muscular contraction that produces movement, there is another kind of contractile activity known to physiologists as muscular *tonus*—a form of muscular tension which is always present more or less, even when the muscles are at rest and the body and limbs are still. Muscular tonus varies in degree in different people, and in the same person it varies in degree from hour to hour. Certain mental states elevate it, others depress it. Higher in “nervous” people and lower in stolid people, it is always greater during attention, less during listlessness. It is markedly

heightened by loud musical sound, and it is still more heightened by loud noise. See how nervous people jump at a sudden bang, and note also how after the climax of a *fortissimo* passage by the orchestra there follows a relaxation of our muscles which we did not till then realise had been contracted.

The point I wish to make is now clear. The noise of a railway train increases muscular tension and sustains it at the elevated level, thus producing the strain which leads to train-tiredness, and it is the relief of this strain that is felt when the ear-plugs are inserted.

I have dwelt upon the subject of train-tiredness for a special purpose, a purpose connected with my main argument. If noise is thus capable of producing nerve-exhaustion we have reason, clear and definite, why on medical and common-sense grounds, we should labour to bring about a reduction of the noises in our City of Din.

Use and wont can do much. Eels, they say, get used to skinning. Hence it comes about that when the city-man goes into town he never notices the noise, save when it is so

loud as to render him deaf to ordinary conversation, as when one of those brewers' steam-engines and drays crashes along the streets.

But we have not always been thus heedless of the din. The most striking impression a child receives during a trip to town is that of a noise which deafens him, stupefies him, and reduces him to silence and a frightened sense of his own exceeding smallness.

Many years ago I remember meeting in a large railway terminus a young lady who had just arrived in one of our cities from the Outer Hebrides. Until that day she had never seen a railway train. The poor girl was flushed and bewildered, and when I asked her what it was that struck her most she replied with a frown : " The noise."

Once only did I ever hear a train produce a pleasant sound, and so rare a fact is worthy of mention. I was travelling in Switzerland and had arrived worn, dirty, and dishevelled, at Interlaken. An open train took us through a maze of trees, the branches of which almost brushed our faces as we passed along. At that moment the noises of the train, broken up, I suppose, into a million little echoes by

the myriads of leaves, fell upon the ear with a rushing sound like the ripple of a shallow river over its pebbles. It is now many years since I heard that sound, and to this day yet it lingers gratefully in my memory.

So much now for noise and its evils in ordinary life. In this tempestuous sea of sound we unfortunates are hopelessly immersed. Science has acquainted us with the atrophy of organs from lack of use, as in the blind fish that inhabit cavern waters. But there is another form of atrophy, and that is atrophy from over-use or abuse. Will the men of the future be born deaf so that their sensitive brains may be spared the paralysing impact upon them of the heavy blows of artificial sound? The question is less fanciful than it appears. Heredity and development have effected more radical transformation than this in the structure of animal bodies.

We now turn to consider the effect of noise upon those whose occupation exposes them to the influence of loud sounds.

In my endeavours hitherto to depict the

harm produced by the noises in our streets and houses, it will doubtless have been remarked that the effects produced are general and not local; that their influence operates on the brain rather than on the ear itself; on the personality as a whole rather than on the organ of hearing. And it is true that I have not, so far, been able to detect any signs indicative of damage to the ear itself from the noises of everyday life. All the same, I am decidedly of opinion that while ears that are healthy receive little or no actual or demonstrable damage, to those ears, on the other hand, which catarrh or other disease has rendered delicate, the loud noises of our streets and railways actually are harmful, and for that reason I hold that such ears should always be protected against loud sounds by plugs or ear-coverings, exactly in the same way that people with weak eyes are advised to wear tinted spectacles in a bright light.

In the case of workmen and others who are exposed to loud noises in the course of their employment, however, we find that it is the hearing apparatus which becomes deranged. These men, whether their ears

are healthy or not to begin with, sooner or later become deaf. Here, in other words, we have men who have already suffered the fate which in a moment of gloomy foreboding I held out as likely to overtake mankind as a race unless it set about reducing the noise in the world.

Noise-deafness is due to a destruction of the auditory nervous apparatus by the excessive stimulation produced by the fall of loud sounds upon it. All noise, that is to say all unpleasant sound, is harmful. When it is intermittent it is only the brain that suffers, and the damage produced is merely temporary; when, on the other hand, the noise is continuous, then it is the organ of hearing itself that is injured, and the effects of the injury persist just as if—I do not, however, say that this is the real reason—just as if Nature adopted this method of protecting the brain of those habitually exposed to loud noise.

To the foregoing description of the genesis of noise-deafness there is an exception. A single exposure to a noise, if it be loud enough, may produce deafness, and deafness which proves to be permanent. But the general rule holds good that noise-deafness is usually the

result of noise of relatively moderate intensity if it is continuous, or if the ear is exposed to its influence at regular intervals and for prolonged periods.

We sometimes speak of an *ear-splitting* noise, and this expression is perfectly accurate, for the membrane of the ear—popularly known as “the drum”—may be ruptured by a sudden noise of great intensity such as an explosion.

Although deafness in gunners must have been known for centuries, probably ever since gunpowder was invented, the first form of noise-deafness to be scientifically examined was that occurring in boiler-makers.*

It was Dr. Thomas Barr, of Glasgow, who, in 1886, first, in this country at all events, scientifically investigated noise-deafness. His patients were boiler-makers, who, in the course of their work, are exposed to noise of

* I think I have read somewhere that in the South Sea Islands exposure to the booming sound of the ocean breakers on the coral reefs renders the natives deaf. But although deafness may be unusually common amongst these people, that it is due to noise and not to other factors, such as the action of the salt water upon the canal of the ear, is not to my mind quite clear.

the most appalling character. I quote from his paper on the subject :

“In the process of boiler-making, four different classes of men are engaged—riveters, caulkers, platers, and ‘holders-on.’ The riveter drives in with a large hammer the red-hot iron rivets for binding the plates together ; the caulker hammers with a chisel the edges of the plates so as to ensure complete tightness ; the plater forms the iron plates and arranges them accurately in position ; while the holder-on stands inside the boiler holding a large hammer, the head of which he presses against the inner end of a rivet. These are not all equally exposed to loud sounds, and they differ, therefore, in the extent to which their ears are affected. The men who work inside the boiler, such as the ‘holders-on,’ are, of course, exposed to the loudest and most damaging sounds. Their ears are near to the rivet which is being hammered in by the riveter outside. The iron on which they stand is vibrating intensely under the blows of perhaps twenty hammers wielded by twenty powerful men. Confined by the walls of the boiler, the waves of sound are vastly intensified, and strike the tympanum with appalling force, while the vibrations from the iron pass directly through the bodies of the men to the delicate structures of the inner ear. If, in such circumstances, we venture into the interior of a boiler, our first impulse is to hurry out, or to stop our ears with our fingers. We are conscious not merely of the sound waves, like blows, producing their terrible effects upon our ears, exciting therein sharp, painful, intolerable sensations, but our bodies seem to be enveloped in invisible and yet tangible waves which we

actually feel striking against our heads and our hands. When I underwent this experience I fortunately furnished myself with a couple of india-rubber-plugs, and by carefully withdrawing and inserting them in the canals of my ears, I was able at pleasure to admit or shut out the fearful sound. Let no one who values his hearing perform such an experiment without similar precautions. After such an experience one is surprised that the delicate mechanism in the interior of the ears can retain its integrity for a single day under the action of these blows of compressed air. In order to experience the full effect of the noises in boiler-making, one must ensconce himself in one of the smaller interior chambers such as a 'super-heater' or flue, where the air-space is still more confined, while the plates which are being hammered are thin, and therefore give forth notes not only intensely loud but extremely shrill. Even men whose hearing has been blunted by years of exposure to the sounds of boiler-making are, I am told, forced in such circumstances to protect their ears with cotton-waste or such like stopping. Amid the overpowering din, communications have generally to be made by pantomimic gestures, and when the foreman wishes to attract the attention of the men, he employs a shrill whistle like a policeman's. When my conductor at one moment, in the loudest and shrillest voice, spoke closely into the passage of my ear, the effect was not that of spoken intelligible words but that of acute pain as the sharp tones pierced my ear."

Since Dr. Barr's paper was published a considerable amount of work has been done on

the subject, with the result that we now know that not boiler-makers alone but many other workmen also who labour amid noise suffer from noise-deafness. The list of occupations which tend to damage the hearing is a formidable one, including, as it does, workers in metals generally, such as blacksmiths, ship-builders, locksmiths, coppersmiths, tinsmiths, iron-turners, file-makers, plate-makers, and tinkers; together with railway workers, especially engine-drivers and stokers; beetlers, weavers, and other workers among noisy machinery; and lastly, riflemen, artillerymen, and naval gunners.*

In short, appropriately enough, our noisy civilisation is based upon a din which is literally deafening.

An interesting fact concerning noise-deafness has recently been brought to light by Dr. T. Ritchie Rodger working under the guidance of Dr. Logan Turner, of Edinburgh. This is that in the early stages of noise-deafness the particular part of the organ of hearing which is deafened is that which

* According to several authorities telephone employés run no risk of noise-deafness.

corresponds to the pitch of the predominant note in the deafness-producing noise. A glance over the deafening occupations we have just enumerated will show that in some of them the noise is made up chiefly of high-pitched or squeaking sounds, as in the boiler-making described by Dr. Barr, while in others, such as "beetling," the noise is a complex of low-pitched sounds.

("Beetling" is a stage in the process of finishing cotton cloth. It consists in subjecting the material, which is wound round horizontal wooden cylinders, to the repeated impact of long, heavy, wooden logs, or "beetles." The noise thus generated is a sort of thundering purr which, as Dr. Barr remarked concerning the noise of boiler-making, can be felt vibrating in the body, and especially in the chest, as well as in the ears.)

Rodger Ritchie's suggestion, then, is that the boiler-maker loses his hearing for high-pitched, and the beetler his hearing for low-pitched sounds before the rest of the hearing suffers, as it does in the later stages.

Perhaps I ought to interpolate a word here to explain the significance of this curious occurrence. That portion of the internal ear which is specialised for the reception of sound waves is known as the *organ of Corti*.

Of its minute anatomy there is no need to speak. What interests us specially is that it may be likened to the keyboard of a piano, and that, as Helmholtz supposed, the sound waves play upon this physiological piano, exciting thereby a nervous impulse interpreted by the brain as a sound, varying in pitch with the rate of the sound-waves and with the part of the piano which is touched by them. If, then, this invisible piano player hammers violently and incessantly upon one note or one group of notes, he breaks them, and thereafter they remain for ever silent—the person becoming deaf to that particular tone or group of tones. In the later stages the deafness extends to affect the rest of the hearing as we have already said.

It will have been noticed that the above list includes gunners and riflemen who are exposed to the sound of explosions.

An explosion generates a sound-wave of enormous amplitude with a steep ascent and a gradual slope. The size of explosion sound-waves varies, as does their form, from the short sharp crack of the service rifle up

to the mountainous billow of sound that emanates from the great naval guns and monster howitzers. Naturally, a single discharge of the former is less dangerous to the hearing than a single discharge of the latter. But in the case of machine-guns, although each individual shot may cause but a trifling report, nevertheless by the repetition of the explosions the sound makes up in duration what it lacks in intensity, with the consequence, as machine-gunners have often told me, that the rattle of quick-firers is always more deafening than the individually louder but less frequently repeated discharge of heavy ordnance. A rapid repetition of the latter, however, as the naval battles of the Great War have proved, is probably one of the most terribly destructive to hearing of all the sounds of civilisation.

When heavy guns are fired two elements in the consequent aerial disturbance have to be considered; the "blast," namely, and the "boom" of the explosion.

The blast, which is felt by everyone standing within a conical area towards the front or a little to one side of the muzzle of the gun, is a massive displacement or pro-

pulsion forwards and outwards of a conically-shaped area of the atmosphere, the apex of which is the mouth of the gun. The boom of the explosion, on the other hand, is a sound-wave, of tremendous size no doubt, but still nothing more than a wave; an oscillation, that is to say, of the individual molecules of the air; an intense condensation followed by a rarefaction, the air as a mass not moving at all. The blast, having all the violence of an overwhelming blow, is capable of stunning and even of killing anyone who might be rash enough to wander within the range of its action, so that if the ears were affected they would be so only as part and parcel of a diffuse and almighty smack. But by standing well behind the muzzle of the gun one is safe from its effects, as in that situation one is outside the cone of displacement. In the case of the boom, however, there is no position in the vicinity of the gun where one can avoid it, as it spreads equally all round through a spherically-shaped area of the atmosphere, the centre of which is the mouth of the gun. Thus the noise is as great behind the gun as it is to one side of it. So tremendous in these great explosions is

the condensation and rarefaction of the air that the drum of the ear may be rent by it in precisely the same way in which the closed windows of a house are shattered by heavy firing. You can preserve your windows intact by leaving them open when guns are being fired, because in that position, the pressure being equal at the same moments on both sides of the glass, the panes are not submitted to any strain and remain unbroken. In like manner, gunners, when firing, open their mouths in a semi-yawn, as this opens the Eustachian tubes which lead from the throat to the middle ear, and so equalises the pressure on either side of the drum membrane, thus preventing its rupture. But it is to be remembered that this manœuvre, although it protects the drum membrane, does not prevent the transmission of the sound from the air to the delicate organ of Corti.

In ordinary peace-practice, gun-firing is neither so intense nor so prolonged as it is in war, and yet it is capable of inducing a considerable amount of deafness among those who are exposed to the noise for lengthened periods.

As a rule, naval gunners and gunnery

officers suffer much more from the effect of gun-firing upon the ears than do artillery officers and men on land. There are two reasons for this difference. The first is that the sound-shock from guns fired in the turrets of ships is much more concentrated than it is from guns which are fired in the open; and the second is that in a ship the sonorous vibrations are transmitted without loss by its steel structure to the bones of the body, whereas on land they are absorbed and dissipated in the earth.

In order to comprehend the significance of the latter reason it is necessary to understand that sound may reach the ear not only from the air through the canal of the ear, but also through the bones of the body and skull in the same way as sound may be conveyed along a plank of wood, for example, or through water. For all ordinary purposes conduction through the bones is negligible. But in the case of the loud sonorous noise of gun explosions the sound-waves travel to the ear both through the canal and through the bones of the body and skull. That being so, in order to protect the hearing against the destructive effects of heavy gun-firing, a

flooring of some non-conducting material, such as rubber-matting, should form part of the equipment of the turrets of a battle-ship. For the same reason, naval gunners should be instructed to stand during the firing with knees half-bent and back curved, or, if they are lying prone, to raise the head from the deck, so as to impede as much as possible the transmission of the sound through the bones of the body. In the French navy the skull itself is protected against the impact of the sound by a helmet which both covers the head and closes in the canals of the ears—a most excellent device.

In thus guarding against the transmission of sound vibrations through the bones of the body and skull we are, of course, closing only one of the avenues of approach to the nervous organisation of the internal ear. There remains to be considered the more important avenue, that, namely, through the external canal of the ear, which, as I have just remarked, is the usual route by which sound reaches us. This route may be more or less blocked by ear-plugs.

I have already spoken of the use of ear-plugs in railway travelling, and I now proceed

to discuss their employment as preservatives of hearing in the midst of loud noises of all kinds.

We adopt ear-plugging instinctively when we put our fingers into the ears to protect them from an unpleasant noise. Unfortunately, fingers are not always available for this purpose, and Nature, not having foreseen the astonishing increase of din in the modern world, has failed to furnish us with earlids to protect the hearing as eyelids protect the sight. Consequently, we must invoke the aid of art to repair Nature's lack of forethought.

The plugs which may be used for this purpose are many and various.

The most popular is that made of cotton-wool. Unfortunately, the stopping power of dry cotton-wool is very slight, certainly less than that of the fingers. And there are many other materials which are much more effective. Hard rubber is sometimes used, and cotton-wool mixed with vaseline has its adherents. But by far the most efficient plug, in my opinion, is that introduced by Sir William Dalby many years ago. This is a plastic material, like cobbler's wax,

with which is incorporated as a binding material a modicum of cotton-wool. Unfortunately, as supplied by the dealers, this *antiphone* is somewhat costly, too costly at all events for workmen and gunners. For this reason I suggested some years ago to the authorities at the Admiralty and the Home Office ear-plugs composed of plasticine and cotton-wool, "*fibrous plasticine*" as it is called, and although the material is not perhaps so elegant as the other, it answers the purpose very well, and has been widely adopted, I believe, both in the Navy and in noisy workshops and factories.

There is one little practical point to be observed in using plastic ear-plugs, and that is, that shortly after the plug has been packed into the meatus, or canal of the ear, the air enclosed in the canal, becoming warm, undergoes expansion and causes an uncomfortable sensation of pressure in the ears. When this is felt it can at once be relieved by easing or removing the plug for a moment so as to permit of the escape of the excess of heated air from the meatus.

There is another variety of ear-plug which has been favourably received. This is known

as the "Mallock-Armstrong Ear Defender," the essential constituent of which seems to be a fine membrane like gold-beater's skin. Personally I prefer the plastic plug, but that may only be a matter of prejudice or habit.

One great advantage of all such ear-plugs is that although they exclude loud and harsh noises, or at least reduce them to the point of tolerance, they offer so little obstruction to the tones of the human voice that ordinary conversation is quite audible, so that men can use them and still hear the word of command.

In concluding this section, however, I should once more like to direct attention to the French naval helmet, which ought certainly to be adopted by the British Navy.

We come now to the noises of modern war, beside which, in all conscience, all other earthly sounds, natural or artificial, are no more than the murmurs of a pigmy world. Of the frightful din of a modern battle it is impossible to convey even the faintest conception. There is no noise or combina-

tion of noises that even remotely approaches it for loudness, for persistence, and for harmfulness both to hearing and to brain. Many men who have had to endure its agonies have been rendered totally deaf; many others have been driven insane, their nervous system being hopelessly and permanently disorganised by its appalling intensity and persistence. A relative of my own, describing his experiences, writes :

“The noise, especially during the two hours before the attack, was appalling. It was unceasing, heart-rending, brain-rending. It was noise gone mad, out of all bounds, uncontrolled.”

While other, but no less expressive, observers sum it up in the simple phrase: “Hell with the lid off”—there is no doubt, you see, that to the modern mind, Hell is the place of noise. The experience, apart from the indescribable feeling of tension, is nerve-shattering even when casualties are but few, and the wonder is, not that hard and stalwart men are reduced by it to a state of collapse ending in insanity, but that any man is capable of withstanding the strain and of

performing deeds of coolness and of courage amidst the maddening turmoil and uproar in which the whole universe seems to be overwhelmed.

The problem of the mitigating of the noises of war is one of peculiar difficulty. To begin with we have certainly no desire to spare our enemy any of its discomforts and terrors, and if noise adds to his misery and detracts from his bravery our endeavour must be to keep him immersed in it. But with regard to our own men the aspect of affairs is, of course, quite different. The practical outcome of this consideration is that we ought to have guns that are silent firing shells that are noisy. Now, I am not aware whether any experiments have been undertaken with the object of rendering cannon silent, but it is a possible development which, if any improvement at all resulted, would amply repay the time and money spent upon it. The essential difficulty, of course, and that which renders the silencing of guns a problem totally different from the silencing of the internal combustion engine, is that in the former the power must necessarily be

expended in the direction of the vent. For all that, when we remember the amazing achievements of scientific engineering, we ought not to turn away from the problem as from one incapable of solution. The directions in which progress might be made are obvious. The well-known trick of silencing sounds by clashing them might be enlisted in the experiments, as also might be the muffling powers of hollow chambers. As a matter of fact the whole subject is one of interest to the physicist, quite apart from any practical value it may possess. Doubtless when we come to go into the matter we shall find that the problem has already been thoroughly thrashed out—in Germany.

At all events the Germans have already solved the problem in so far as the rifle is concerned, if we may believe the following report from Gallipoli (The ‘Times,’ July 23rd, 1915):

The rifle silencer “is a very simple device. It consists of two small brass tubes one within the other and attachable to the muzzle of the rifle. The space between the tubes is filled with a ring of steel springs. At the moment of discharge the air expelled from the rifle forces the springs outwards, and in so doing wastes its impact and loses its sound.”

Pending such developments as these in our armies we should encourage our soldiers to use ear-plugs. Some of them already do so, indeed, and find them of great value. The only drawback to their use is that they sometimes render it difficult to hear enemy shells approaching and to locate their direction. But this objection applies only to certain localities.

Having now described the modern malady of Din, having indicated its causes, detailed its symptoms, and pointed out its dangers, my next duty is to show, if I can, how improvement may be brought about.

To begin with, there can be no doubt that there is a shocking amount of superfluous sound in our modern cities—useless, dangerous, gratuitous noise ; noise that can be easily checked when once attention is directed to it. Candidly speaking, we must admit that within the last twenty years or so much of the noise proceeding from street and road traffic has been considerably reduced by the introduction and gradual extension of smooth road surfaces, whether of wood, asphalte, or pitch, and by the substitution of rubber for

iron tyres upon the wheels of vehicles. The improvement which has followed the sensible enforcement of police regulations against loud bugle-playing, horn-blowing, and other displays of joyful noise, must also be gratefully acknowledged. But while improvement can be observed in some respects, in others the nuisance shows no abatement, and in others again there has actually been a retrogression. The motor-horn, for example, is a harsh and vulgar sound in comparison with the musical tinkle of the old hansom-cab.

On the whole, however, there is welcome evidence to show that slowly, but surely, there is growing up in the minds of the public a strong desire to bring about a reduction in street noises, and we are, therefore, justified in our hopes that the chances of reformation in this particular form of the nuisance are great and promising. And if only the desire becomes an active determination the desirable quietude will, I am sure, be speedily achieved.

London, as a matter of fact, is a quiet city already, compared with many of its sister-cities at home and abroad. To an American,

fresh from the harassing din of New York, Chicago, and other transatlantic cities, London seems curiously peaceful and even somnolent. So that, both at home and abroad there is still much room for improvement, improvement which can be easily effected.

With regard to noisy occupations much remains to be done. But modern engineers, unlike politicians, are not stricken with paralysis at the thought of difficulties, and I believe firmly that under the combined influence of Factory Inspection and the Workmen's Compensation Act, devices will soon be forthcoming which will bring the noises of machinery within reasonable limits. As a matter of fact, modern engineering developments, even without this special end in view, have already resulted in some abatement of unpleasant noise. One of the most welcome characteristics of electrically driven machinery, for example, is that, on the whole, it is much less noisy than steam-driven machinery, and the same is true of hydraulic power. The turbine, again, produces much less thump and clatter on board ship than the old locomotive or tube boiler.

The railway offers the most difficult

problem of all. But even here some considerable reduction in noise may be remarked. The modern railway carriage on its "bogey" wheels is much less noisy than the old. Much improvement, also, can be obtained by careful plate-laying, with smoother running and diminution of friction and racket. But, when all is said and done, there is still room for improvement in our railways. I have already indicated that whistles ought to be abolished, and I believe that railway carriages could easily be made more noise-proof than they are at present. This applies with special force to the Tube Railways of London, the din of which is so great that it is almost impossible to converse during the passage from one station to another.

Generally speaking, much of the unpleasant and jarring noises in vehicles, whether on the railway or on the road, is due to bad workmanship or to carelessness in upkeep, whereby nuts work loose, bands and struts become slack, door-panels and window-panes are detached, and add, each one its mite, to the sum total of buzz and rattle. All of the noises produced in this way are preventable.

Assuming, however, that street-noise will always be more or less disturbing there arises for our consideration the problem of the quietening of dwelling-houses and business premises.

With regard, first of all, to the "deafening" of houses and apartments, I regret to say that many modern houses, particularly those which are made into tenements or flats, are not nearly so well segregated from each other's noises as the older houses are. And yet this great comfort is attainable nowadays at relatively little cost. In its way, the quietening of a house is almost as important as the provision of a sufficiency of cubic air space, and, being a matter of health, it ought, therefore, to be brought under the control of Public Health Departments.

Too little attention has been hitherto paid by our architects and housewives to the necessity for peace and restfulness in our bedrooms. Within the last quarter of a century we have witnessed a triumphant crusade in favour of the open window, a crusade which some are inclined to believe has been carried to undue lengths. But there is another desideratum, and one which

our predecessors understood much better than we do, and that is that bedrooms ought to be both dark and quiet during occupation. The exclusion both of light and of sound renders sleep deeper and more refreshing, since the lower nerve centres of sight and hearing in the brain are thereby permitted to participate in the blessings of rest. Light and sound are both apt to cause dreaming, and dreams always denote imperfect sleep.

Light can be easily shut out by means of dark blinds and curtains without at the same time excluding fresh air. But in noisy streets sound cannot be kept out if the windows are open. For that reason, the bedrooms in street-houses should be placed at the back of the house. As things are at present, however, such advice is merely a counsel of perfection. The most grievous and sleep-destroying noise of to-day is, of course, the motor-horn, and its use ought to be prohibited, at least between the hours of 10 p.m. and 7 a.m.

The employment of double windows in dwelling-houses, clubs, and offices, is a most successful method of rendering rooms quiet, but again it conflicts with the necessity for

ventilation. So that at every turn we are brought face to face with the problem of cutting off noise at its source.

On the whole, however, we may, I feel sure, conclude our remarks in a strong note of hope. The stars in their courses are fighting for us. But the victory will come all the sooner if public opinion can be educated to regard noise as an evil to be condemned and reformed out of existence with all possible dispatch.



THE LITANY OF DIN.

Window-panes in gusty winds,
Rattling cords and restless blinds—
Crazy crows on chimney-pots—
Motor-cycles' pistol-shots—
Banging of doors in an empty street—
Clatter of clogs from a hundred feet—
Buzzers busy ; factory bulls—
The screeching of mishandled tools—
Squealing brakes and clanking rails,—
Strauss's music (shrieks and wails)—
A brass band beating all its drums—
A fiddler shuffling as he strums—
Dolorous groans as neighbours grim
Murder their one and only hymn—
Fussy folk with tongues a-clatter,
Empty heads and aimless chatter—
Laughter prim, and those enigmas,
The stifled plaints of borborygmus—
The fog-bound syren's echoing wail—
The rigging-shriek of ship in gale—
The weary bang of flapping shutter—
The gibberish that madmen mutter—
A greasy beggar's whining tale—
A politician's "cakes and ale"—
A blatant voice in a pulpit high—
Complacent grunts from an odorous sty—
Slum-yell rending the startled air,
Testament of wild despair—
The clamour loud of a man on the make—
The sland'rous hiss of the human snake—
The outworn teachings of the schools—
The damning praise of loud-voiced fools—
The weeping of deserted brides—
The sneering jest that envy hides—
The common grumbler's daily growl—
The doorstep wolf's impatient howl—
The shallow wit of callow youth—
The fearful croak of senile truth—
And (last of all this doleful rhyme)
The creaking of the wheels of Time—

From these, with all their weary fuss,
O! may the Powers deliver us ;
And send, to soothe our aching ears,
The mystic music of the spheres !



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